ORDER NO.ODSD020421C1

B12

Service Manual

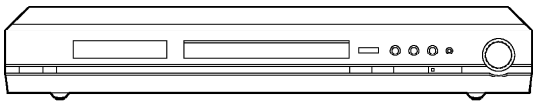
DVD Player

DVD-RP62P / DVD-RP62PC

Colour

(K).....Black Type

(S).....Silver Type



SPECIFICATIONS

Specifications

Power supply:	AC120 V, 60 Hz
Power consumption:	14 W
Dimensions:	430 (W)×267 (D)×60 (H) mm [1615 /16 ”(W) x 102 /4 ”(D) x 26 /16 ” (H)] (excludingprotrusions)
Mass:	2.4 kg (5.3 lb.)
Signal system:	NTSC
Operating temperature range:	+5 to +35°C (+41 to 95°F)
Operating humidity range:	5 to 90 % RH (no condensation)
Region number:	Region No.1

Discs played [8 cm (3”) or 12 cm (5”)]:

(1) DVD-Video

(2) DVD-R (DVD-Video compatible)

(3) CD-Audio (CD-DA)

(4) Video CD

(5) CD-R/CD-RW (CD-DA, Video CD formatted discs)

(6) MP3/WMA

- Maximum number of tracks and groups recognizable:

  999 tracks and 99 groups

- Compatible compression rate:

MP3:	between 32 kbps and 320 kbps
WMA:	between 48 kbps and 192 kbps

Video output:

Output level:	**1 Vp-p (75 Ω)**
Output terminal:	**Pin jack**
Number of terminals:	**1 systems**

S video output:

Y output level:	**1 Vp-p (75 Ω)**
C output level:	**0.286 Vp-p (75 Ω)**
Output terminal:	**S terminal**
Number of terminals:	**1 system**

Component video output (480P/480I):

Y output level:	**1 Vp-p (75 Ω)**
PB output lebel:	**0.7 Vp-p (75 Ω)**
PR output level	**0.7 Vp-p (75 Ω)**
Output terminal:	**Pin jack (Y:green, PB :blue, PR :red)**
Number of terminal:	**1 system**

Audio output:

Output level:	**2 Vrms (1 kHz, 0 dB)**
Output terminal:	**Pin jack**
Number of terminals:	
2CH:	**1 system**
Subwoofer output (0.1 channel):	**1 system**

Audio performance:

(1) Frequency response:

● **DVD (linear audio):**	**4 Hz-22 kHz (48 kHz sampling)** **4 Hz-44 kHz (96 kHz sampling)**
● **CD audio:**	**4 Hz-20 kHz**

(2) S/N ratio:

● **CD audio:**	**115 dB**

(3) Dynamic range:

● **DVD (linear audio):**	**102 dB**
● **CD audio:**	**98 dB**

(4) Total harmonic distortion:

● **CD audio:**	**0.0025 %**

Digital audio output:

Optical digital output:	**Optical terminal**

Pickup

Wave length:	**658 nm/790 nm**
Laser power:	**CLASS 2a/CLASS 1**

Power consumption in standby mode:

approx. 2 W

Note:

Specifications are subject to change without notice.

Mass and dimensions are approximate.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. SAFETY PRECAUTIONS

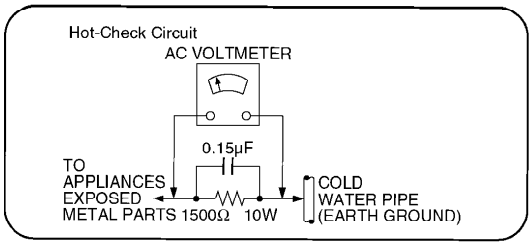
1.1. GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1. LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to thechassis, the reading should be between 1MΩ and 5.2MΩ. / When the exposed metal does not have a return path to the chassis, the reading must be ∞.

Figure 1



1.1.2. LEAKAGE CURRENT HOT CHECK (See Figure 1 .)

1. **Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.**
2. **Connect a 1.5k Ω , 10 watts resistor, in parallel with a 0.15 μ F capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1 .**
3. **Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.**
4. **Check each exposed metallic part, and measure the voltage at each point.**
5. **Reverse the AC plug in the AC outlet and repeat each of the above measurements.**
6. **The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current mu3st not exceed 1/ 2 milliamp. In case a measurement is outsideof the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.**

2. PREVENTION OF ELECTRO STATIC DISCHARGE (ESD) TO ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistorsand semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. **Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your**

body by touching a known earth ground. Alternatively, obtain and wear a commercially available dischargingESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.

2. **After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as alminum foil, to prevent electrostatic charge buildup or exposure of the assembly.**
3. **Use only a grounded-tip soldering iron to solder or unsolder ES devices.**
4. **Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.**
5. **Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.**
6. **Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, alminum foil or comparableconductive material).**
7. **Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.**

   Caution

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. **Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise hamless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient todamage an ES device).**

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are imporant for safety.
These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

3. Precaution of Laser Diode

CAUTION:

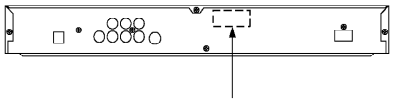
This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.
Wave length: 658 nm/790 nm
Maximum output radiation power from pickup: 100 μ W/VDE
Laser radiation from the pickup lens is safety level,but be sure the followings:

1. Do not disassemble the optical pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.

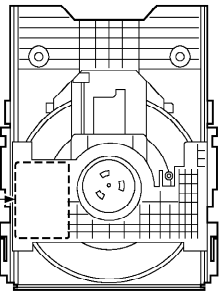
ACHTUNG:

Dieses Produkt enthält eine Laserdiode.
Im eingeschalteten Zustand wird unsichtbare Leserstrahlung von der Laserinheit adgestrahit.
Wellenlänge: 658 nm/790 nm
Maximale Strahlungsleistung der Lasereinheit: 100 μ W/VDE
Die Strahlungan der Lasereinheit ungefährlich, wenn folgende Punkte beachtet werden:

1. Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.
2. Den werkseitig justierten Einstellregler der Lasereinhit nicht verstellen.
3. Nicht mit optischen Instrumenten in die Fokussierlines blicken.
4. Nicht über längere Zeit in die Fokussierlines blicken.



Product complies with DHHS Rules 21 CFR Subchapter J in effect at date of manufacture.
Matsushita Electric Iudustrial Co., Ltd.
Kadoma, Osaka, Japan



CAUTION!
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

4. General Description

4.1. Operating instructions

5. PREVENTION OF STATIC ELECTRICITY DISCHARGE

The laser diode in the traverse unit (optical pickup) may brake down due to static electricity of clothes or human body. Use due caution to electrostatic breakdown when servicing and handling the laser diode.

5.1. Grounding for electrostatic breakdown prevention

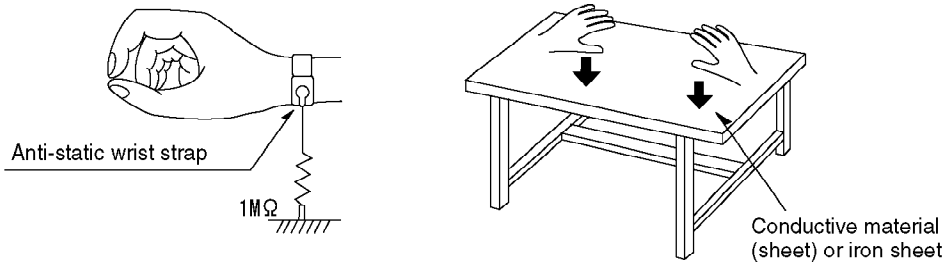
Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

5.1.1. Worktable grounding

1. Put a conductive material (sheet) or iron sheet on the area where the optical pickup is placed, and ground the sheet.

5.1.2. Human body grounding

1. Use the anti-static wrist strap to discharge the static electricity form your body.



5.1.3. Handling of optical pickup

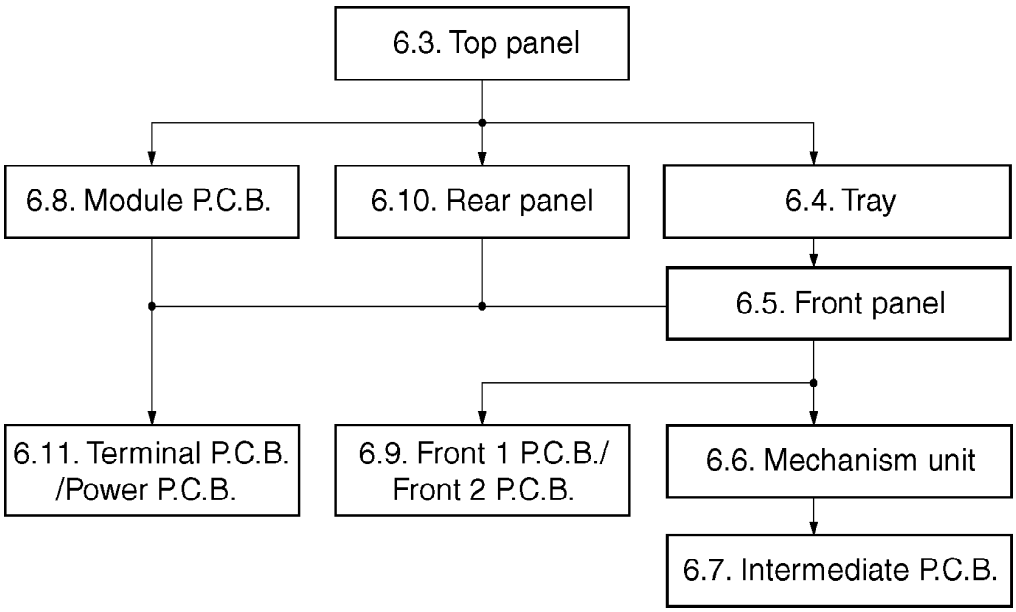
1. To keep the good quality of the optical pickup maintenance parts during transportation and before installation, the both ends of the laser diode are short-circuited. After replacing the parts with new ones, remove the short circuit accordingto the correct procedure. (See this Technical Guide.)
2. Do not use a tester to check the laser diode for the optical pickup. Failure to do so will damage the laser diode due to the power supply in the tester.

5.2. Handling Precautions for Traverse Unit (Optical Pickup)

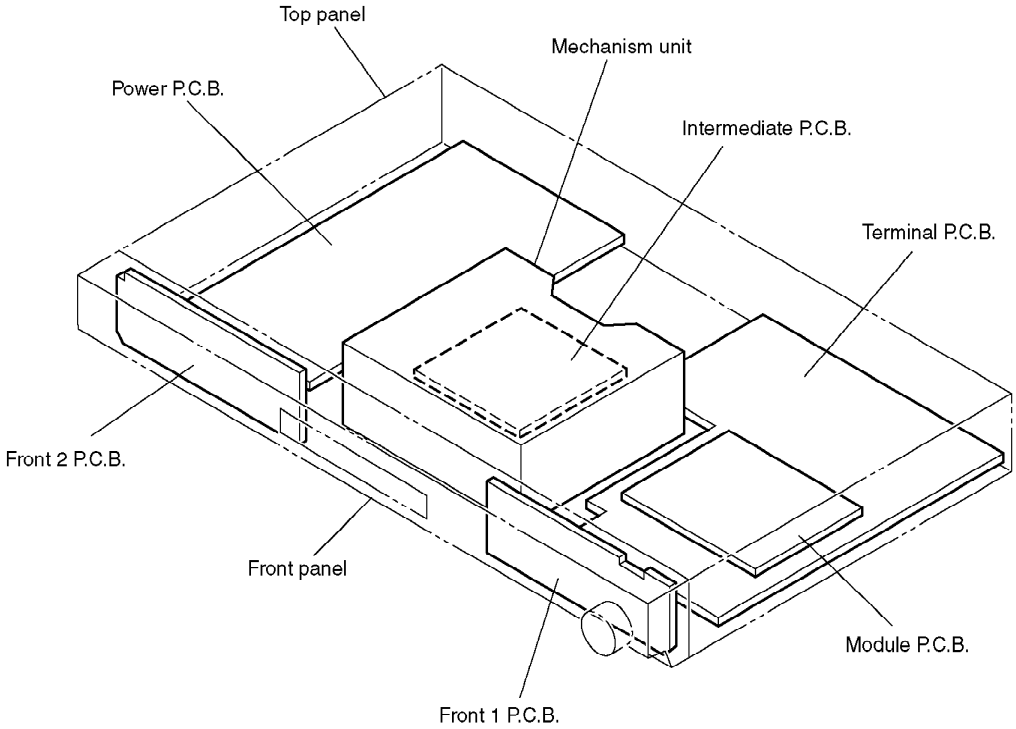
1. Do not give a considerable shock to the traverse unit (optical pickup) as it has an extremely high-precise structure.
2. When replacing the optical pickup, install the flexible cable and cut its short land with a nipper. See the optical pickup replacement procedure in this Technical Guide. Before replacing the traverse unit, remove the short pin for preventingstatic electricity and install a new unit. Connect the connector as short times as possible.
3. The flexible cable may be cut off if an excessive force is applied to it. Use caution when handling the cable.
4. The half-fixed resistor for laser power adjustment cannot be adjusted. Do not turn the resistor.

6. Disassembling the Casing and Checking P.C.B.s

6.1. Dissasembly Procedure

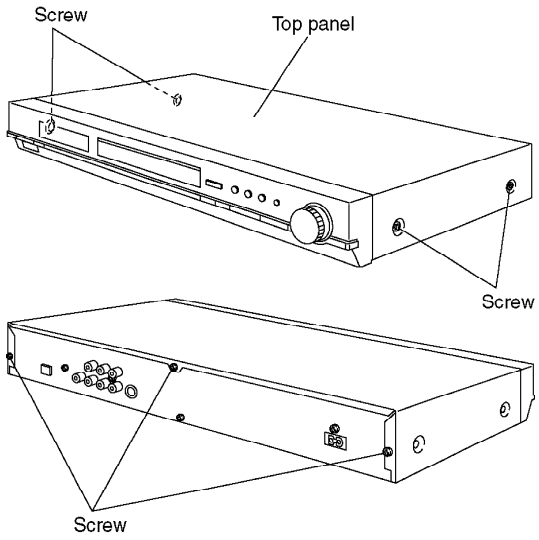


6.2. Caseing Parts and P.C.B. Positions



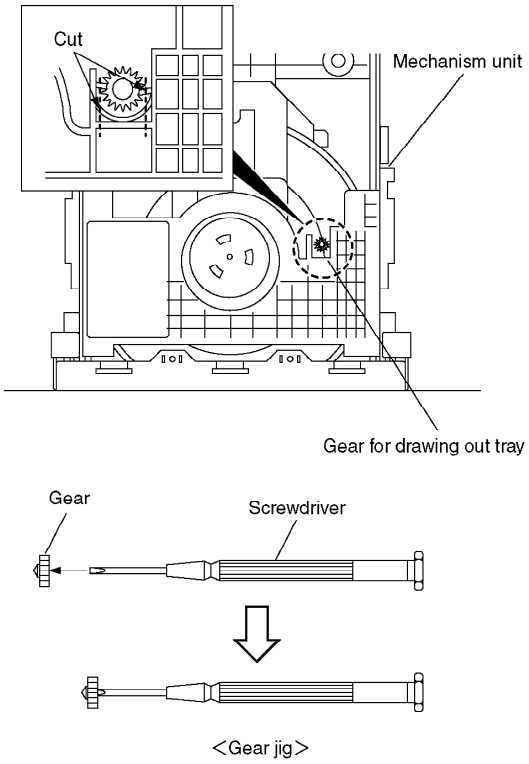
6.3. Top Panel

1. Unscrew the screws.

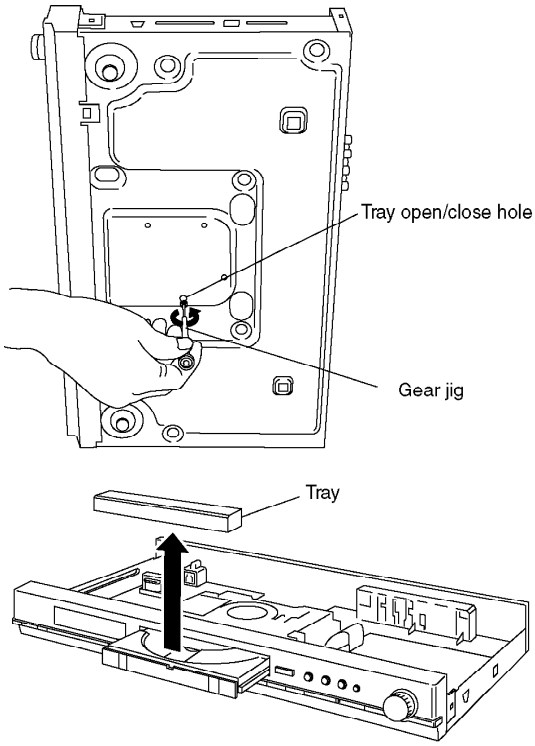


6.4. Tray

1. **Pull the tray out of the mechanism unit. Remove the gear and install it onto a screwdriver to make a gear jig.**
2. **Insert the gear jig into the tray open/close hole.**
3. **Turn the gear jig counterclockwise to open the tray.**
4. **Remove the tray from the tray section.**

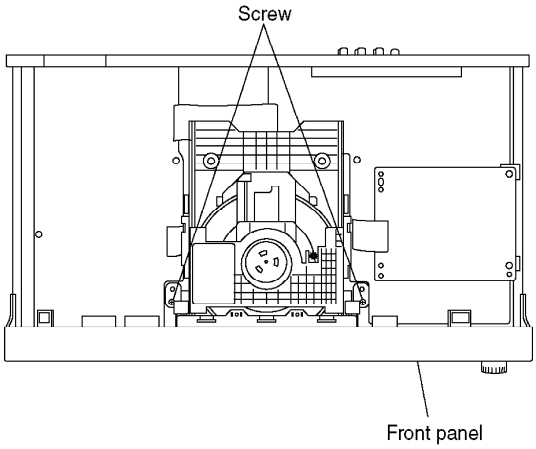


<Gear jig>



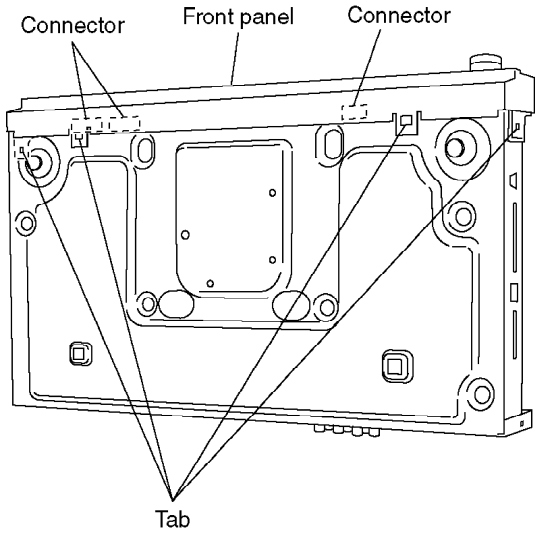
6.5. Front Panel

1. Unscrew the screws.



2. Release the tabs.

3. Remove the connectors.

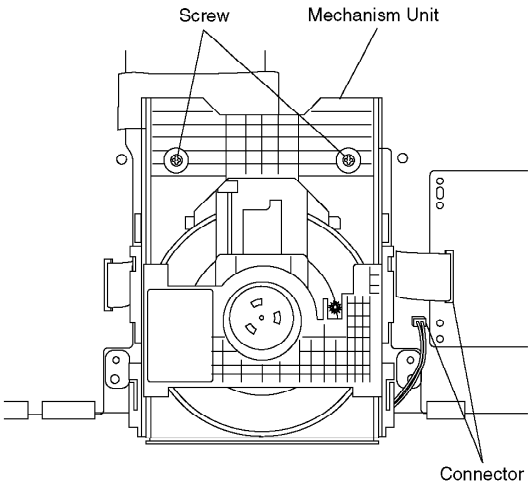


6.6. Mechanism Unit

1. Unscrew the screws.

2. Remove the connectors.

3. Pull out the mechanism unit vertically.

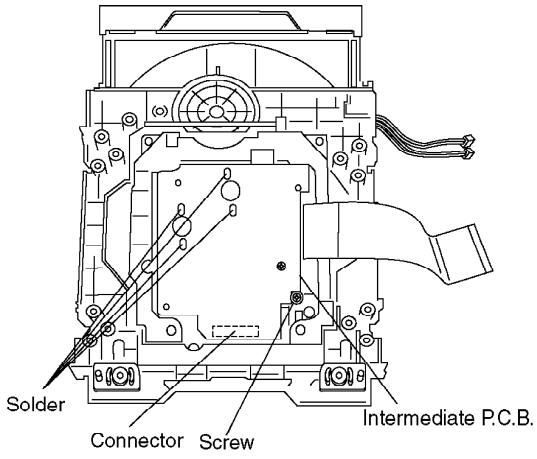


6.7. Intermediate P.C.B.

1. Unscrew the screw.

2. Remove the solders.

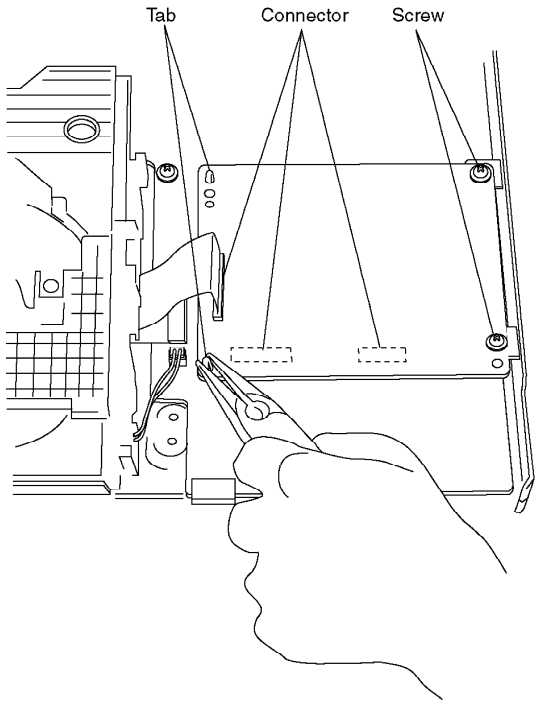
3. Remove the connector.



<Mechanism unit bottom>

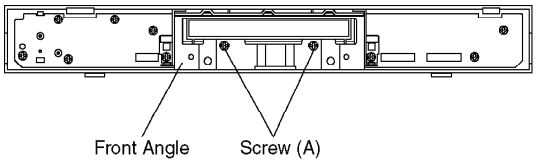
6.8. Module P.C.B.

1. Unscrew the screws.
2. Remove the connectors.
3. Press each tab with the nipper to pull out the module P.C.B vertically.

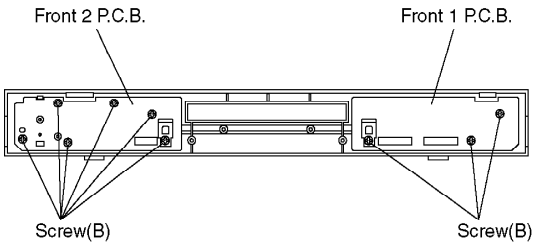


6.9. Front 1 P.C.B. and Front 2 P.C.B.

1. Unscrew the screws (A).
2. Remove the Front Angle.



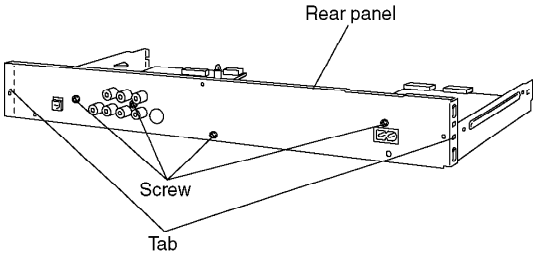
3. Unscrew the screws (B).



6.10. Rear panel

1. Unscrew the screws

2. Release the tabs.

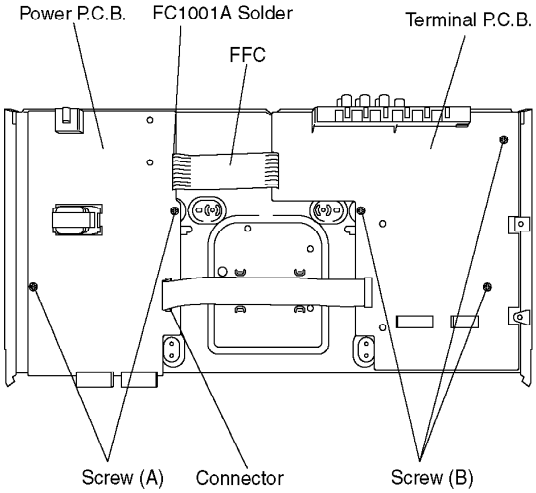


6.11. Terminal and Power P.C.B.

1. Remove the connector.

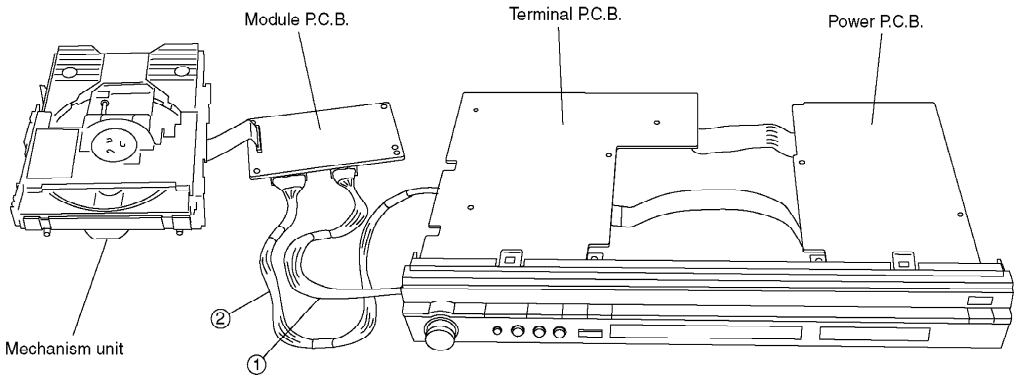
2. Unscrew the screws.

3. Remove the FC1001A solder.

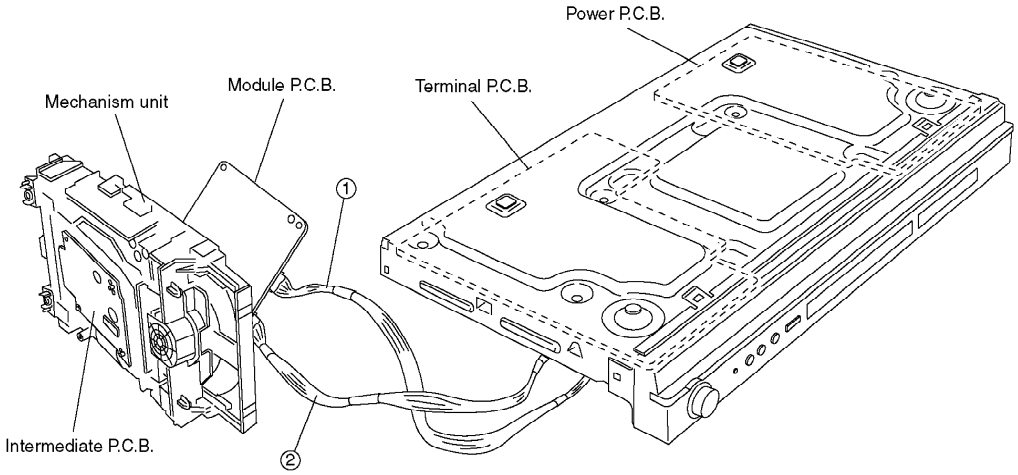


6.12. Servicing Position

6.12.1. Servicing position of the Module P.C.B.



6.12.2. Servicing position of the Intermediate P.C.B.



6.12.3. List of the Extention Cables

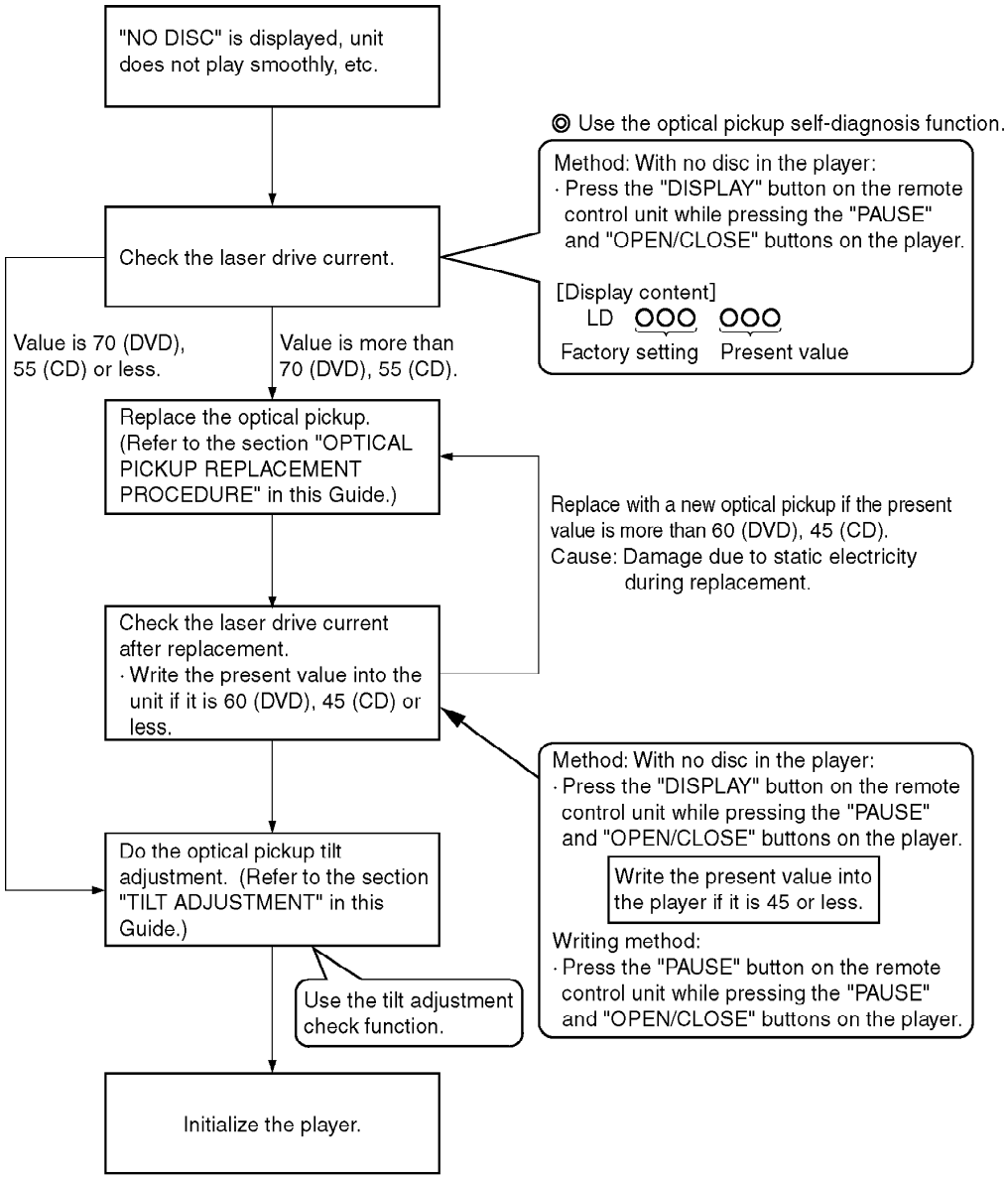
①	JGS0098	26pins	PS4201(Module P.C.B.)—PP4301(Terminal P.C.B.)
②	JGS0116	22pins	PS3201(Module P.C.B.)—PP3201(Terminal P.C.B.)

7. OPTICAL PICKUP SELF-DIAGNOSIS AND REPLACEMENT PROCEDURE

7.1. Self-diagnosis

The optical pickup self-diagnosis function and tilt adjustment check function have been included in this unit. When repairing, use the following procedure for effective Self-diagnosis and tilt adjustment.Be sure to use the self-diagnosis functionbefore replacing the optical pickup when "NO DISC" is displayed. As a guideline, you should replace the optical pickup when the value of the laser drive current is more than 55.

Note:
Press the power button to turn on the power, and check the value within three minutes before the unit warms up. (Otherwise, the result will be incorrect.)



7.2. Cautions to Be Used Before Replacing the Optical Pickup Unit and Spindle Motor Assembly

Before replacing the optical pickup unit and spindle motor assembly, check the total using hours for each of them. The checking method is as follows:

	Operating state & Key operation	Display
Using hours of CD laser	Press "PAUSE", FWD-SKIP" and "5" on the remote control in this order while the unit is stopped	T1_xxxx_yyyy yyyy: total hours are displayed by 4-digit figures (unit: 10 hours).
Using hours of DVD laser	Press "PAUSE", FWD-SKIP" and "5" on the remote control in this order while the unit is stopped	T1_xxxx_yyyy yyyy: total hours are displayed by 4-digit figures (unit: 10 hours).
Using hours of SP motor	Press "PAUSE", FWD-SKIP" and "6" on the remote control in this order while the unit is stopped	T2_xxxx xxxx: total hours are displayed by 4-digit figures (unit: 10 hours).
Resetting using hours of CD and DVD lasers (Simultaneous resetting)	Press " STOP ", FWD-SKIP" and "6" on the remote control in this order while the unit is stopped	T1_0000_0000
Resetting using hours of the motor	Press " STOP ", FWD-SKIP" and "6" on the remote control in this order while the unit is stopped	T2_0000

Cautions to be taken when replacing the optical pickup

The optical pickup may break down due to the static electricity of human body. Take proper protection measures against static electricity before repairing the parts around the optical pickup. (See the page describing the PREVENTION OF STATIC ELECTRICITYDISCHARGE.)

1. Do not touch the areas around the laser diode and actuator.

2. Do not judge the laser diode with a tester. (The tester will be damaged easily.)

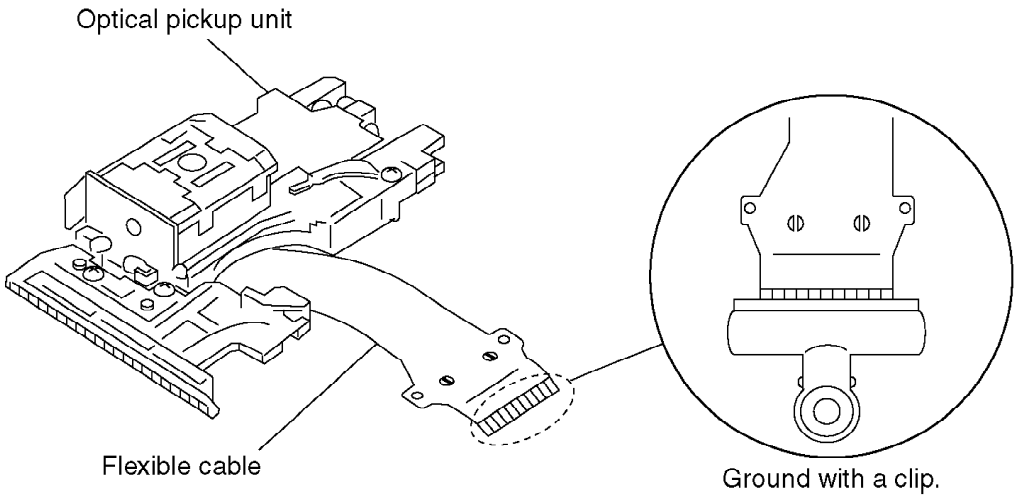
3. It is recommended to use a destaticized soldering iron for short-circuiting or removing the laser diode. (Recommended soldering iron) HAKKO ESD Product

4. Solder the land of the flexible cable in the optical pickup.

Note:

- When using a soldering iron which is not destaticized, short-circuit the terminal face of the flexible case with a clip. After that, short-circuit the land.

- After the repairing work is completed, remove the solder according to the correct procedure shown in this Technical Guide.



8. Self-Diagnosis Function and Service Modes

8.1. Service Mode Table 1

The service modes can be activated by pressing various button combination on the player and remote control unit.

Player buttons	Remote control unit buttons	Application	N
PAUSE + OPEN/CLOSE	0	Displaying the UHF display F_ _ _	Refer to 8.2. Self Diagnos Functio Display)
	5	Jitter check, tilt adjustment *Display shows J_xxx_yyy_zz "yyy" and "zz" shown to the right have nothing to do with the jitter value. "yyy" is the error counter, while "zz" is the focusdrive value. Refer to section 11.4. for Optical Pickup Tilt Adjustment Procedure.	Refer to 11.4. Op Pickup T Adjustm
	6	Checking the region numbers and broadcast system	
	7	Checking the program version	Check th FLASH I program
	9	Lighting Confirmation Function of Display Tube	
	DISPLAY	Checking the laser drive current	Refer to 10 Optic Replace Procedu
	PAUSE	Writing the laser drive current value after replacing the optical pickup (do not use for anything other than optical pickup replacement)	

Player buttons	Remote control unit buttons	Application	N
PAUSE SKIP/ SEARCH<< OPEN/CLOSE		Initializing the DVD player (restoring factory preset settings)	Refer to 9.4. Initi DVD pla

8.2. DVD Self Diagnostic Function-Error Code

Error Code	Error Content	Additional error explanation	Defect 1	Defect 2	Defect 3
	U, H error				
U11	Focus error				
H01	Tray loading error				
H02	Spindle servo error	(Spindle servo, DSC (IC2001) SP motor, CLV servo error)			
H03	Traverse servo error				
H04	Tracking servo error				
H05	Seek error				
H06	Power error	Cannot switch off the power because of the panel and system computer communication error			
	DSC related				
F500	DSC error	DSC (IC2001) stops in the occurence of servo error (starup, focus error, etc)	Optical pickup	ADSC (IC2001)	FEP (IC5201)
F501	DSC not Ready	DSC-system computer communication error (Communication failure caused by idling of DSC)	ADSC (IC2001)	CPU (IC6201)	
F502	DSC Time out error	Similar disposal as F500	Optical pickup	ADSC (IC2001)	FEP (IC5201)
F503	DSC communication Failure	Communication error (result error occured although communication command was sent)	ADSC (IC2001)	FEP (IC5201)	EEPROM (IC6303)
F505	DSC Attention error	Similar disposal as F500	Optical pickup	ADSC (IC2001)	FEP (IC5201)
F506	Invalid media	Disc is flipped over, TOC unreadable, incompatible disc	DISC	FEP (IC5201)	ADSC (IC2001)
	ODC related				
F600	Access failure to management information caused by demodulation error	Operation stopped because navigation data is not accessible caused by the demodulation defect	ODC (IC2001)	FEP (IC5201)	ADSC (IC2001)
F601	Indeterminate sector ID requested	Operation stopped caused by the request to access abnormal ID data	ODC (IC2001)	FEP (IC5201)	ADSC (IC2001)
F602	Access failure to LEAD-IN caused by demodulation error	LEAD IN data unreadable			

Error Code	Error Content	Additional error explanation	Defect 1	Defect 2	Defect 3
F603	Access failure to KEYDET caused by demodulation error	Access failure to CSS data of disc			
F610	ODC abnormality	No permission for command execution	ODC (IC2001)		
F611	6626 QCODE don't read Error	Access failure to seek address in CD series	ODC (IC2001)		
F612	No CRC OK for a specific time	Access failure to ID data in DVD series	ODC (IC2001)		
F630	No reply to KEY DET enquiry	(for internal use only)			
F631	CPPM KEY DET is not available till the FILE terminal	(CPPM file system is unreadable caused by scratches)	DISC	CPPM (*1)	
F632	CPPM KEY DET is not available	Been revoked or falsified	DISC	EEPROM (IC6303)	CPPM (*1)
	Disc code				
F103	Illegal highlight Position	Big possibility of disc specification violation during highlight display	DISC		
	HIC Error				
F4FF	Force initialize failure (time out)		EEPROM (IC6303)	CPU (IC6201)	FEP (IC5201)
	Micro computer error				
F700	MBX overflow	When replying message to disc manager			
F701	Message command does not end	Next message is sent before replying to disc manager			
F702	Message command changes	Message is changed before it is sent as a reply to disc manager			
F880	Task number is not appropriate	Message coming from a non-existing task			
F890	Sending message when message is being sent to AV task	Sending message to AV task			

Error Code	Error Content	Additional error explanation	Defect 1	Defect 2	Defect 3
F891	Message couldn't be sent to AV task	Begin sending message to AV task			
F893	FROM falsification		FROM (IC6302)	CPU (IC6201)	
F894	EEPROM abnormality		EEPROM (IC6303)	Serial communication on lone	
F8A0	Message command is not appropriate	Begin sending message to AV task			

Note:

An error code will be canceled if a power supply is turned OFF.

***1: CPPM is the copy guard function beforehand written in the disk for protection of copyrights.**

8.3. Last Error Code saved during NO PLAY

Error code	Error Content	System computer	Setting task	System computer i error code
F0BF	6) Cannot playback because physical layer is not recoginizable	PCND_NOPLAY PHYSICAL 0x50	DriveManager	0xDOBF
F0C0	8) DVD: Cannot playback because it is not DVD Video/Adio/VR	PCND_NOPLAY VIDEO 0x70	DiscManager	0xDOC0
F0C1	9) DVD: Prohibited by the restricted region code	PCND_NOPLAY RCD 0x80	DiscManager	0xDOC1
F0C2	A) DVD: PAL restricted playback	PCND_NOPLAY PAL 0x90	DiscManager	0xDOC2
F0C3	B) DVD: Parental lock setting prohibits the playback of the entire title	PCND_NOPLAY PTL 0xA0	DiscManager	0xDOC3
F0C4	C) VCD: Prohibited because it is in PHOTO CD fromat	PCND_NOPLAY PHOTO CD 0xB0	DiscManager	0xDOC4
F0C5	VCD/CD: Prohibited because it is CDROM without CD-DA	PCND_NOPLAY CDROM 0xC0	DiscManager	0xDOC5

8.4. Service mode table 2

Pressing various button combinations on the player and remote control unit can activate the service modes.

Item	Player mode and button combination	Function	Display	Cancellation method
Jitter check	In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and "5" button on the remote control unit.	Jitter check Jitter rate is measured and displayed. Measurement is repeatedly done in the cycle of one second. Read error counter starts from zero upon mode setting. When target block data failed to be read out, the counter advances by one increment. When the failure is caused by minor error, it may be corrected when retried to enable successful reading. In this case, the counter advances by one. When the error persists even after retry, the counter may jump by two or more.	J _xxx_yyy_zz Focus drive value Read error counter Jitter rate Jitter check mode Jitter rate is shown in decimal notation to one place of decimal. Focus drive value is shown in hexadecimal notation.	Press STOP or OPEN button.
Error code check	In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and "0" button on the remote control unit. *With pointing of cursor up and down on display, the panel controller switches serial number of history and sends out the command accordingly.	Error code check The latest error code stored in EEPROM is displayed.	Error code (play_err) is expressed in the following convention. Error code = 0 x DAXX is expressed: -> nn UXX Error code = 0 x DBXX is expressed: -> nn HXX Error code = 0 x DXXX is expressed: -> nn FXXX Error code = 0 x 0000 is expressed: -> nn F--- * "nn" denotes the serial number of history.	Cancelled automatically 5 seconds later.
Initial setting of laser drive current	In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and PAUSE button on the remote control unit.	Initial setting of laser drive currentInitial current value for each of DVD laser and CD laser is separately saved in EEPROM.	LDO_034_028 CD laser current measurement DVD laser current measurement Laser current measurement mode The value denotes the current in decimal notation. The above example shows the initial current is 34mA and 28mA for DVD laser and CD laser respectively when the laser is witched on.	Cancelled automatically 5 seconds later.
DVD laser drive current measurement	In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, andDISPLAY button on the remote control unit.	DVD laser drive current measurement ·DVD laser drive current is measured and the result is displayed together with the initial value stored in EEPROM. After the measurement, DVD laser emission is kept on. It is turned off when POWER key is switched off. (It is also turned off when the primary power is switched off.)	LDD_034_032 Measured current Initial current stored in EEPROM DVD laser current measurement mode The value denotes the current in decimal notation. The above example shows the initial current is 34mA and the measured value is 32mA.	Cancelled automatically 5 seconds later.
ADSC internal RAM data check	In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and RETURN button on the remote control unit.	ADSC internal RAM data check ·ADSC internal RAM data is read out and displayed. Change the address with CLEAR key operation to show the data for 11 addresses.	A_DFA_6901 RAM data for specified address Address ADSC internal RAM data check mode The value is shown in hexadecimal notation. The above example shows the data in ADSC address DFAh is 6901h.	Press STOP or OPEN button.
Servo process display	In STOP (no disc) mode, press PAUSE and FWD-SKIP buttons on the player, and "7" button on the remote control unit.	Servo process display The servo process from STOP to ACCESS is displayed.	————	Pull out the AC cord.
CD laser drive current measurement	In STOP (no disc) mode, press PAUSE and FWD-SKIP buttons on the player, and DISPLAY button on the remote control unit.	CD laser drive current measurement CD laser drive current is measured and the result is displayed together with the initial value stored in EEPROM. After the measurement, CD laser emission is kept on. It is turned off when POWER key is switched off. (It is also turned off when the primary power is switched off.)	LDC_028_026 Measured current Initial current stored in EEPROM CD laser current measurement mode The value denotes the current in decimal notation. The above example shows the initial current is 28mA and the measured value is 26mA.	——

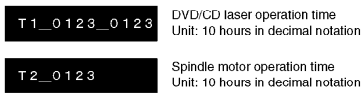
Item	Player mode and button combination	Function	Display	Cancellation method
Version display	In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and "7" button on the remote control unit.	Version display	srrr_xyzzz System controller release number System controller model number System controller generation Panel controller release number Panel controller model number	Cancelled automatically 5 seconds later.
Lighting of display tube	In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and "9" button on the remote control unit.	Lighitng of display tube	————————	Press STOP or OPEN button.
Dealer's lock	In STOP (no disc) mode, press STOP button on the player, and POWER button on the remote control unit.	Dealer's lock The lock is switched ON or OFF. When dealer's lock is ON, it prohibits switching off of the secondary power and tray opening. When the lock is switched, its ON/OFF status is stored in EEPROM.	· "LOCKED" sign appears when dealer's lock is switched on, or when secondary power key or tray opening key is pressed while the lock is on. ·"UNLOCKED" sign appears when dealer's lock is switched off.	Repeat the same operation.
Initialization	In STOP (no disc) mode, press PAUSE, FWD-SKIP and OPEN buttons on the player for 3 seconds or longer.	Initialization User settings are cancelled and player is initialized to factory setting.	"INITIALIZED"	
Region display	In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and "6" button on the remote control unit.	Region display	x__y.y__zzz Panel controller jumper information N: NTSC / 6: PAL60 N: noPAL / P: PAL Region No.	Cancelled automatically 5 seconds later.

Item	Player mode and button combination	Function	Display	Cancellation method
Timer 1 check	In STOP (no disc) mode, press PAUSE and FWD-SKIP buttons on the player, and "5" button on the remote control unit.	Timer 1 check Laser operation timerOperation time is measured separately for DVD laser and CD laser.	T1_1234_5678 Shown to the left is DVD laser time, and to the right CD laser time. Time is shown in 4 digits of decimal notation in a unit of 10 hours. "0000" will follow "9999".	Cancelled automatically 5 seconds later.
Timer 1 reset	While displaying Timer 1 data, press STOP and FWD-SKIP buttons on the player, and "5" button on the remote control unit.	Timer 1 reset Laser operation timer Operation time of both DVD laser and CD laser is reset all at once.	T1_0000_0000	Cancelled automatically 5 seconds later.
Timer 2 check	In STOP (no disc) mode, press PAUSE and FWD-SKIP buttons on the player, and "6" button on the remote control unit.	Timer 2 check Spindle motor operation timer	T2_1234 Time is shown in 4 digits of decimal notation in a unit of 10 hours. "0000" will follow "9999".	Cancelled automatically 5 seconds later.
Timer 2 reset	While displaying Timer 2 data, press STOP and FWD-SKIP buttons on the player and "6" button on the remote control unit.	Timer 2 reset Spindle motor operation timer	T2_0000	Cancelled automatically 5 seconds later.

8.5. Overview of each function

8.5.1. Cumulative operation time display

1. Operation/display



Key operations are as follows.
Laser operation time ..... In STOP mode, main unit PAUSE+ FWD-SKIP+ remote controller [5]
Spindle motor operation time ..... In STOP mode, main unit PAUSE +FWD-SKIP+ remote controller [6]
To reset the timer, perform the following while displaying the time with above key operation.

Laser operation time ..... In STOP mode, main unit STOP+FWD -SKIP+ remote controller [5]
Spindle motor operation time ..... In STOP mode, main unit STOP+ FWD-SKIP+ remote controller [6]

2. How to utilize
Reference information in fault diagnosis of laser or spindle motor system
Review of faulty point in repeated repair

8.5.2. Servo process display

1. Operation/display
While the player is in STOP mode, perform the specified key operation to display the servo process number on FL.
When the display does not change from the error indication, press Open/Close key to show the servo process number.
Key operation: In STOP mode, main unit PAUSE+FWD- SKIP+ remote controller [7]

Number to the left .....Process number when halted
Number to the right .....Process number in progress

8.6. Servo Process Flow

Starting flow	Range of the servo process numbers	Processing items	
		Number	Contents of each process
START			
Initial setting Tray control	00	00	Each initial setting
TRV initial movement	01	01	TRV initial movement
Disc detection	02～08	02	Initial setting in FE system
		05	Detecting LD ON HALF
		08	Detecting CD LD ON
Disc type distinction	02～08	02	Initial setting in FE system
Focus servo	10～13	12	Focus ON
		13	FBAL adjustment
Tracking servo	14～15	15	Tracking ON
Gain learning	17	17	Gain adjustment in ADSC focus system
ID read	18～1A	19	DBAL/equalizer adjustment
		1A	ID read

8.7. Servo Process Display Mode

In starting operation of the player, a number is allotted to
each servo process so that the operation of each step can be seen.
The relation between the process and the displayed number are as follows:

Number allotment to the servo process

Process classification	Each processing item	Description	Process number
Initial start process	Initial start	The process starts after the tray is loaded. (The state is changed to "READY" or PREPARE".)	0~40
	Secondary learning	Servos for the DVD-DL 1st layer and the CD-DA double speed are learned in this step.	50~7F
Restart process	Restart	When a user operates in the "READY" state, each servo is turned on.	80~9F
Seek process	Seek	The optical pickup is moved to the disc destination in this process.	A0~BF
Repair process	Recover		
	(Error check)	An error is searched in the PLAY/SEEK state.	C1~C3
	(Attention)	An error is recovered following the attention error interrupt from the S-ODC.	C4~C6
	(Q code read)	If any Q code is improperly read, reset and retry.	C7~C9
Stop process	Stop	A servo is controlled in response to the user's operation to stop the disc completely.	F0~FF

8.8. Sales demonstration lock function

This function prevents discs from being lost when the unit is used for sales demonstrations by disabling the disc eject function. "LOCKED" is displayed on the unit, and ordinary operation is disabled.

8.8.1. Setting

The sales demonstration lock is set by simultaneously pressing STOP button on the player and POWER button on the remote control unit.

8.8.2. Cancellation

The lock can be cancelled by the same procedure as used in setting. ("UNLOCKED" is displayed on cancellation. Disconnecting the power cable from power outlet does not cancel the lock.)

8.9. Handling After Completing Repairs

Use the following procedure after completing repairs.

8.9.1. Method

Confirm that the power is turned on:

1. Press the "OPEN/CLOSE" button to close the tray.

2. Press the "POWER" button to turn off the power.

3. Disconnect the power plug from the outlet.

8.9.2. Precautions

Do not disconnect the power plug from the outlet with the tray still open, then close the tray manually.

9. Service Precautions

9.1. Recovery after the dvd player is repaired

When an FROM or an EEPROM in and on the module P.C.B. has replaced, carry out the recovery disc processing to optimize the drive.
Playback the disk above to process the recovery automatically,

Recovery disc (Product number: RFKZD5TR006)

Note:
This unit requires no initialization process carried out after the traditional DVD players were repaired.
When the recovery measures are taken, the customer setting will return to the factory setting as same as the procedure described in item of "Initialization" in 8.2. is carried out. Write down the contents of the setting before recovery processing, and reset the player

9.2. Firmware version-up of the DVD player

The firmware of the DVD player may be renewed to improve the quality including operationability and playerbility to the substandard discs.processing to optimize the drive.
The recovery disc has also a recovery function so that you don't need use the recovery disc again.

Note:
If the AC power supply is shut out during version-up due to a power failure, the version-up is improperly carried out.
In such a case, replace the FROM and carry out the version-up again.
The product number of the version-up disc will be noticed when it is supplied.

9.3. Firmware version-up and recovery with disc

- Recovery

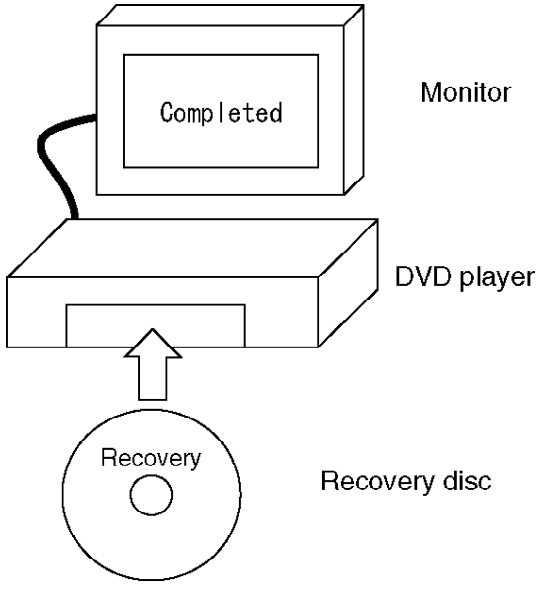
- Firmware updating

Simply run the recovery disc. Then both of the above operations are automatically performed.

Commercially available CD-R can now perform updating and recovery process, making it easier to update the version.

Recovery process: Optimization of player after replacement of FROM, EEPROM and module P.C.B.

Version updating: Firmware updating for improved operability and performance



9.4. How to use recovery disc

9.4.1. Performing recovery

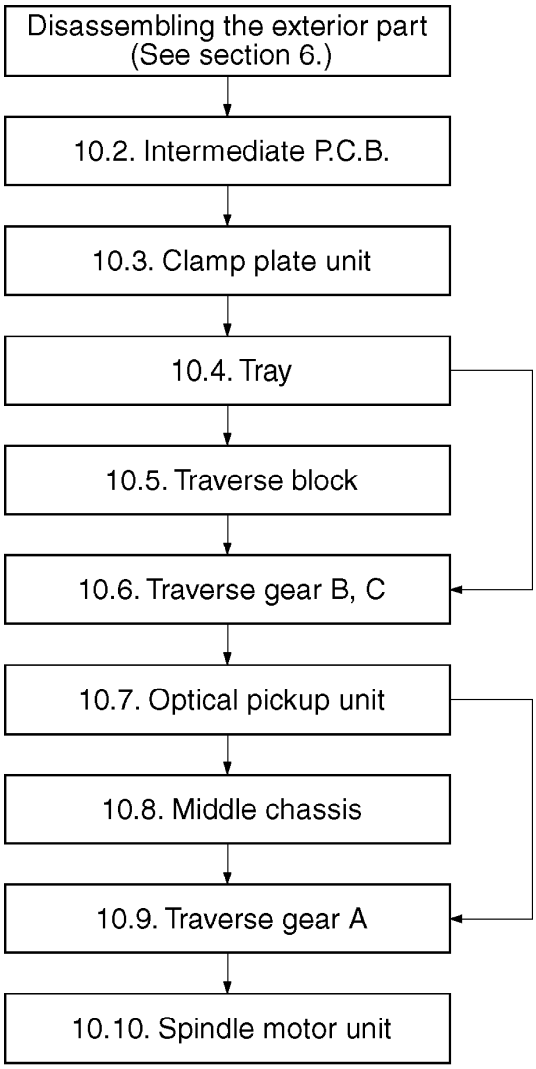
1. Load the recovery disc RFKZD5TR006 on to the player and run it.
2. Recovery is performed automatically. When it is finished, a message appears on the screen.
3. Remove the recovery disc.
4. Turn off the power.

9.4.2. Updating firmware

1. Load the recovery disc RFKZD5TR006 on to the player and run it.
2. Firmware version of the player is automatically checked. Appropriate message appears whenever necessary.
3. Using remote controller's cursor key, select whether version updating is to be done or not. (Selection of Yes/No)
4. a. If Yes is selected, version updating is performed.
   b. If No is selected, only recovery is performed.
5. a. When updating is finished, remove the disc according to the message appearing on the screen.
   b. Remove the disc according to the message appearing on the screen.
6. Turn off the power.

10. ASSEMBLING AND DISASSEMBLING THE MECHANISM UNIT

10.1. Disassembly Procedure

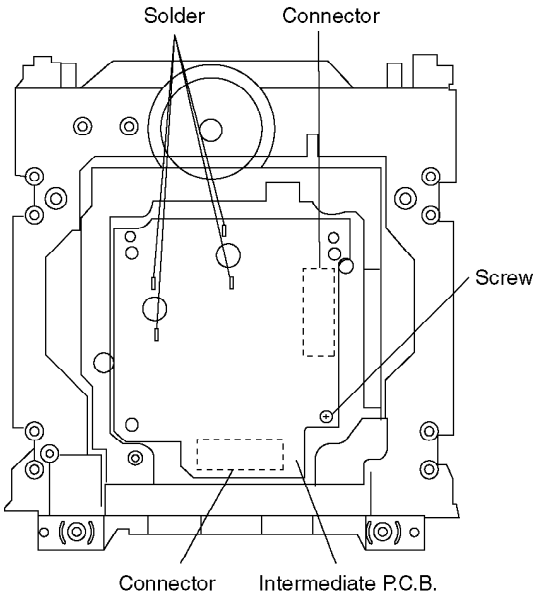


10.2. Intermediate P.C.B.

1. Unscrew the screws.

2. Remove the solders.

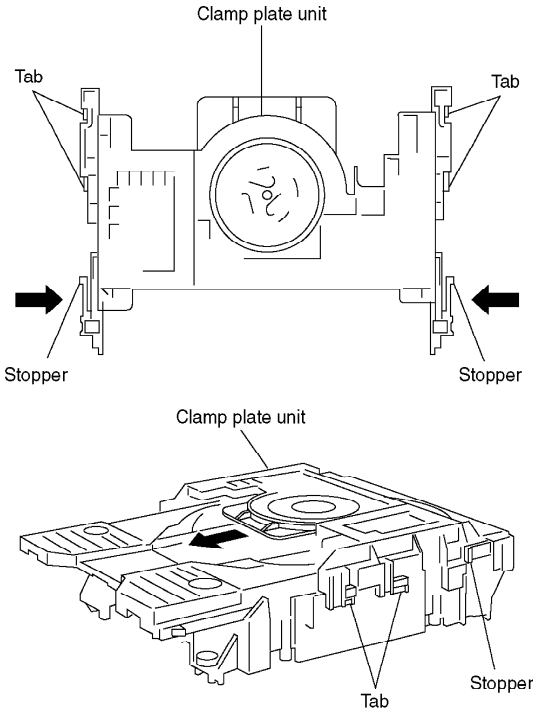
3. Remove the connectors.



<Mechanism unit bottom>

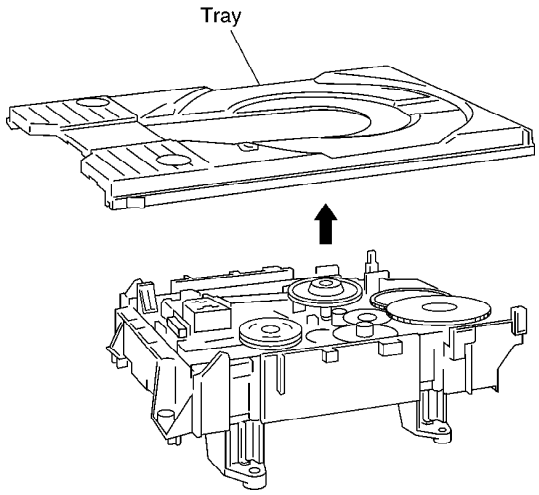
10.3. Clamp Plate Unit

1. Spread the stopper with hand to slide the tabs and remove the clamp plate unit.



10.4. Tray

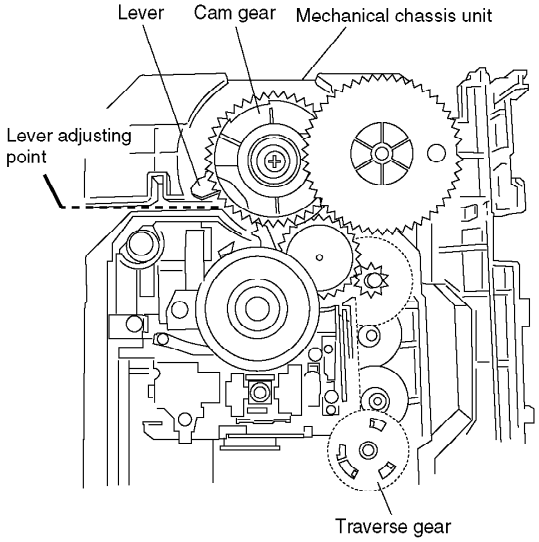
1. Lift the tray.



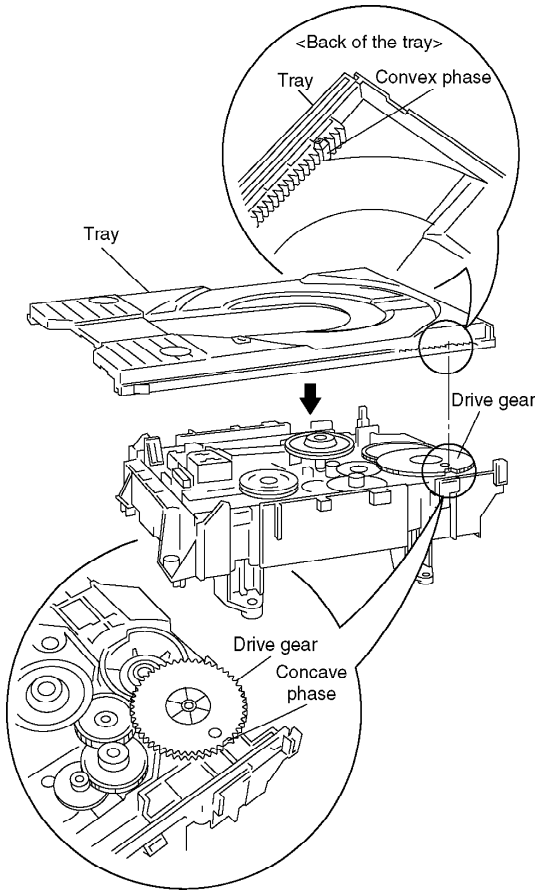
<Precautions in reassembling the tray>

- **Reassemble the tray so that it is in the backmost position.**

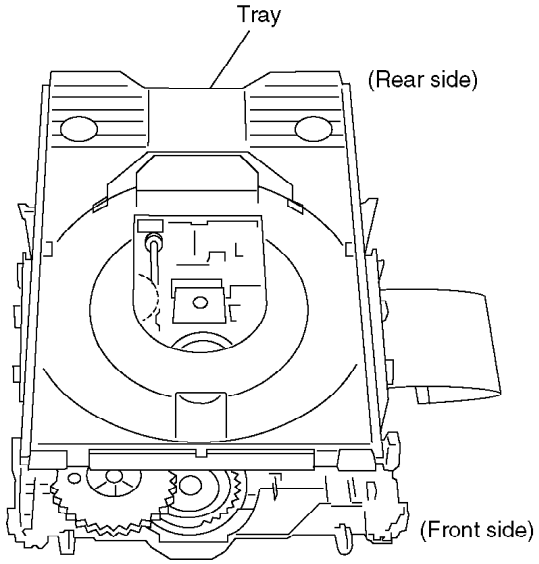
1. Turn traverse gear until cam gear leaver comes to the lever adjusting position at the end of mechanical chassis unit.



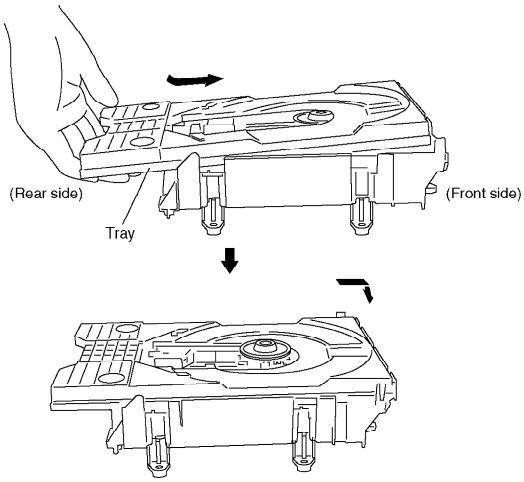
2. Check the position of convex phase on back of the tray, and that of concave phase on drive gear.



A. Place the tray on the unit from rearward.

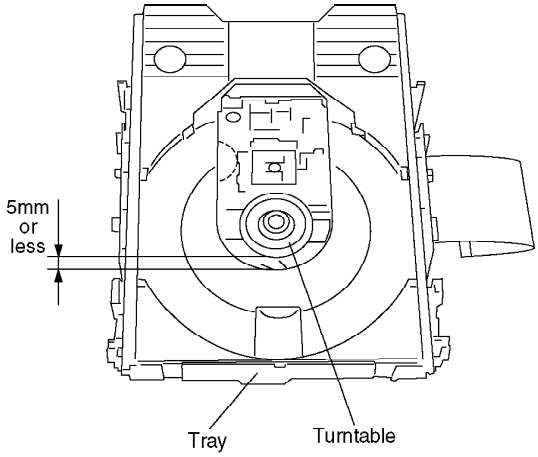


B. Inch the tray frontward until convex phase and concave phase mate.



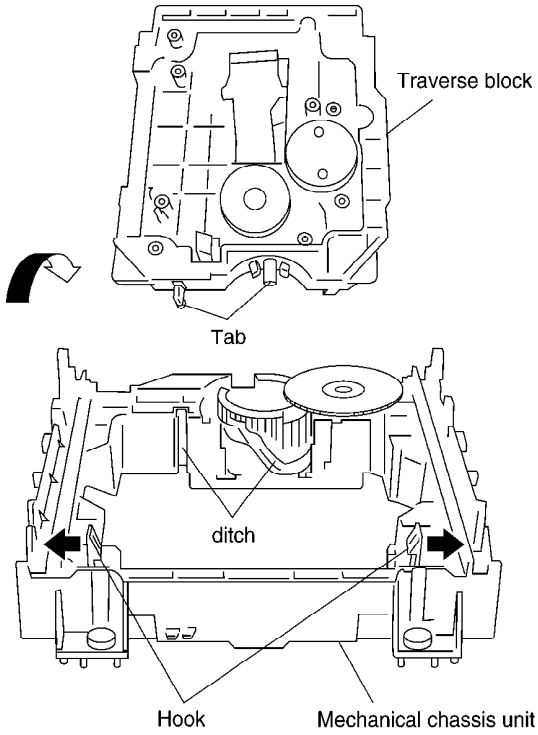
Caution:

Make sure to mate convex phase and concave phase properly, so that the gap between turntable and tray becomes 5mm or less.



10.5. Traverse Block

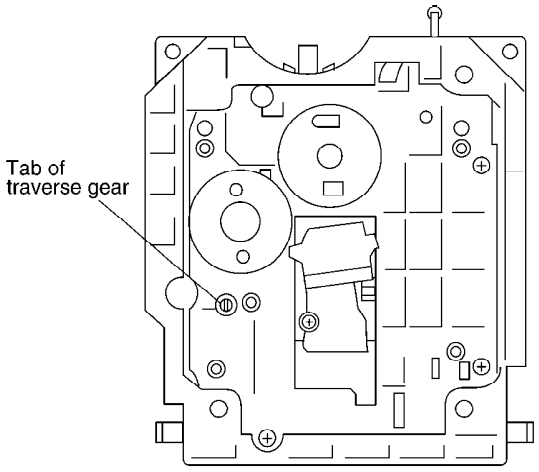
1. **Lift the traverse block while spreading the hook of the mechanical chassis unit.**
2. **Disengage the tabs from the holes of the mechanical chassis unit.**



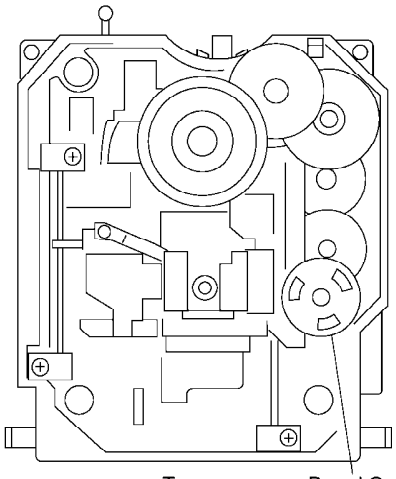
10.6. Traverse Gear

1. Disengage the tabs from the traverse gear.

2. Remove the traverse gears B and C.



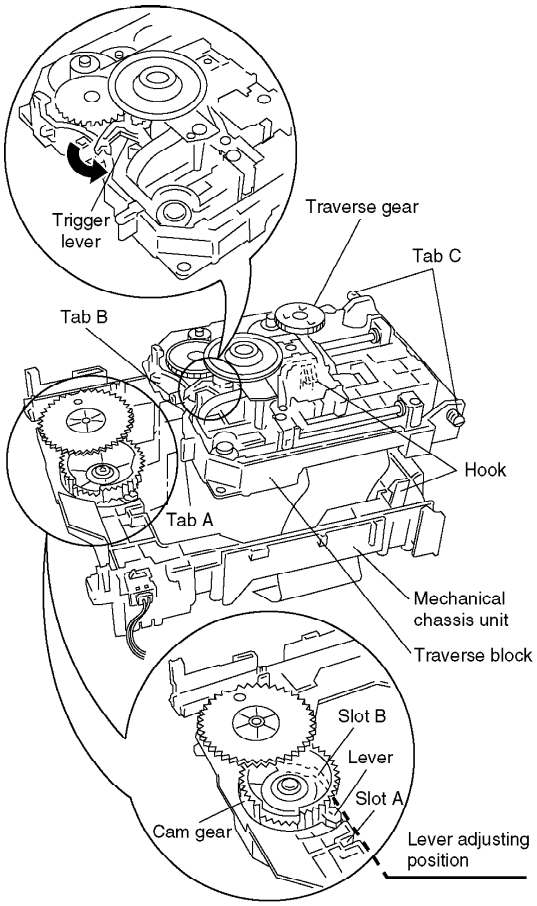
<Traverse block bottom>



<Precautions in reassembling the traverse block>

- **Take the following precautions when reassembling the traverse block.**

1. **Turn traverse gear on the traverse block to let trigger lever turn rightward. (Front view)**
2. **Bring cam gear lever to the lever adjusting position at the end of mechanical chassis unit.**
3. **Put tabs A and B into slots A and B respectively.**
   Place tabs C into hooks to mount the traverse block on mechanical chassis unit. (Slot A... Mechanical chassis unit, Slot B... Cam gear)

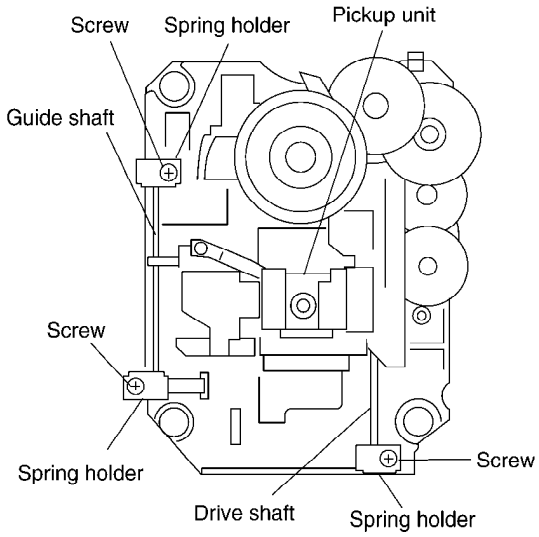


10.7. Optical Pickup Unit

1. Unscrew the screws.

2. Remove the spring holders and the springs.

3. Pull out the drive shaft and guide shaft.



10.7.1. Precautions in optical pickup replacement

The optical pickup can be damaged by static electricity from you body. Be sure to take static electricity countermeasures when working around the optical pickup. (Refer to the related page in this Manual about the countermeasures.)

1. Do not touch laser diode, actuator and their peripheries.

2. Do not use tester to check laser diode. (Laser diode can be damaged easily.)

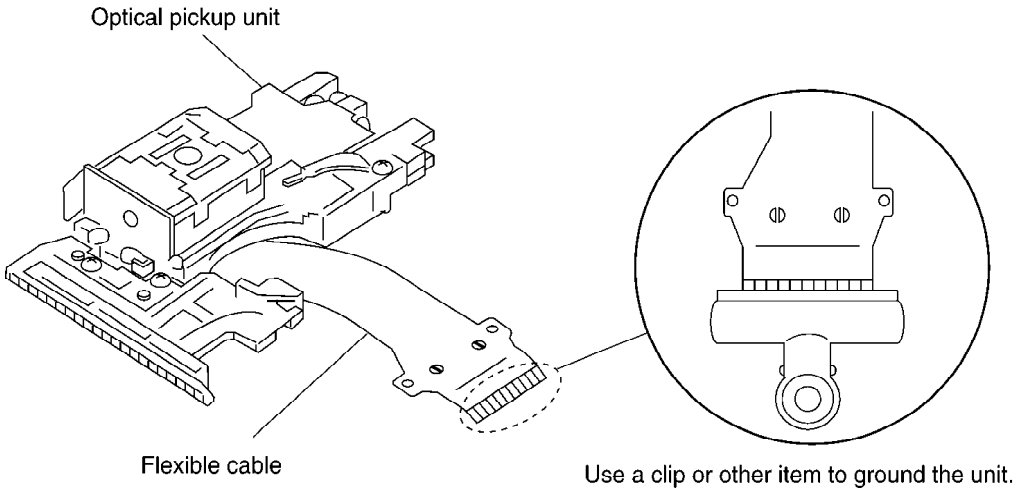
3. The use of soldering iron with anti-static feature is recommended when providing short-circuit to laser diode or when removing it.

4. Solder the land on flexible cable of optical pickup unit.

Caution

- When using the soldering iron without anti-static feature, short-circuit the flexible cable terminal with a clip before short-circuiting the land.

- After intended repair is finished, remove the solder for short-circuit of laser diode in a correct way following the procedures described in this Manual.



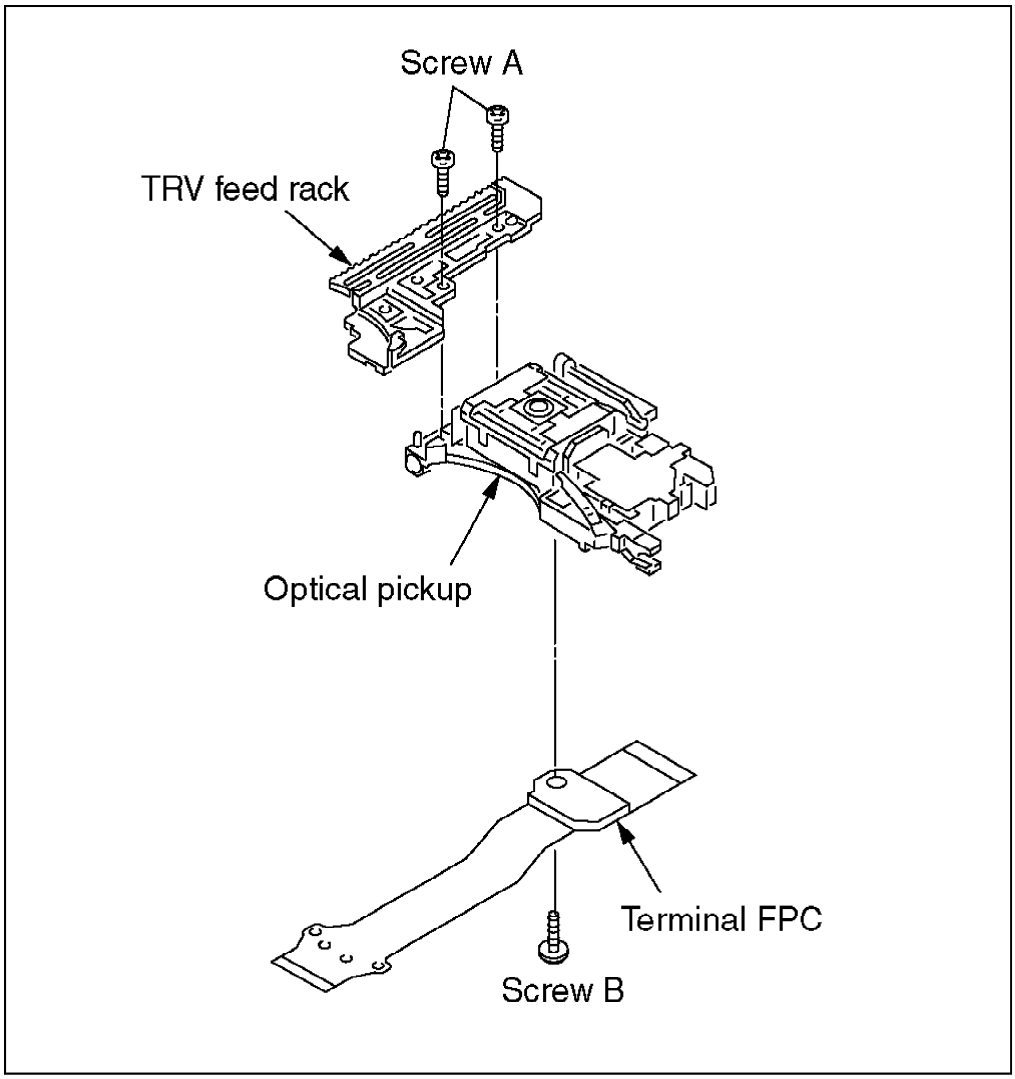
10.7.2. Disassembling the Optical Pickup Unit

1. Remove the 2 screws A and remove the TRV feed rack.

2. Remove the screw B and remove the Terminal FPC.

3. Remove the optical pickup.

Fig. 1



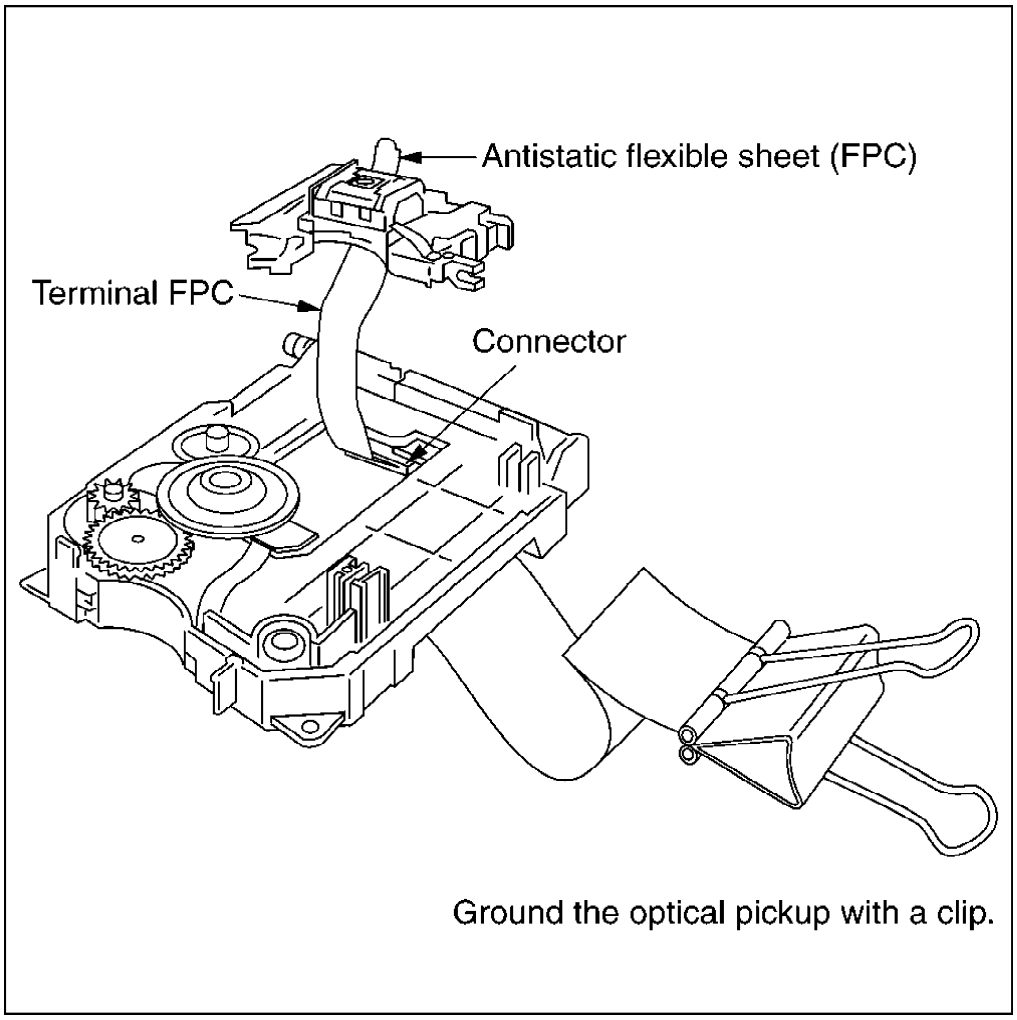
10.7.3. Cautions to Be Taken When Replacing the Optical Pickup

- An antistatic flexible sheet (FPC) is connected with the new optical pickup.
Replace the optical pickup according to the following procedure.

1. Install the Terminal FPC, TRV feed rack on the optical pickup. (See Fig. 1)

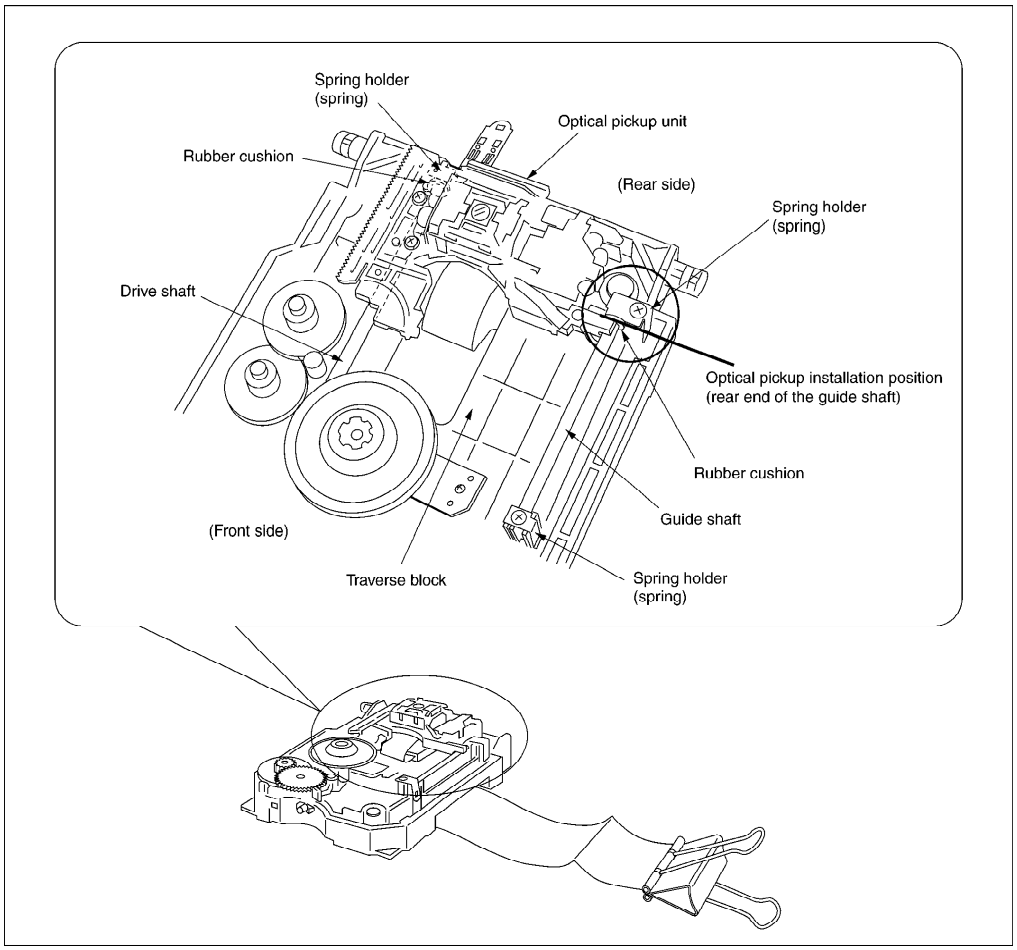
2. Install the Terminal FPC in the connector on the Intermediate P.C.B..

Fig. 2



3. Install the optical pickup unit, spring, drive shaft, guide shaft, rubber cushion, and spring holder on the traverse block.

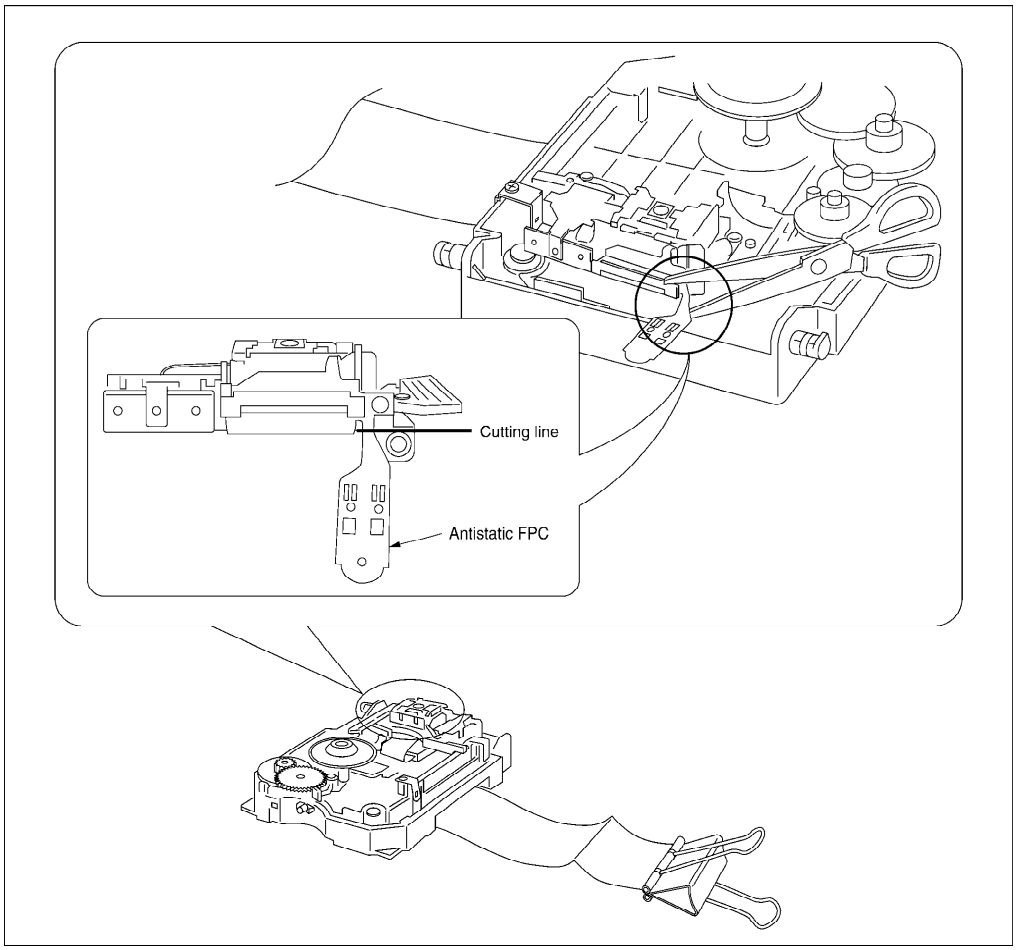
Fig. 3



Cautions to be taken when assembling the unit: Install the pickup unit so that it is located at the rear end of the guide shaft.)

4. Cut the antistatic flexible sheet for the optical pickup unit.

Fig. 4

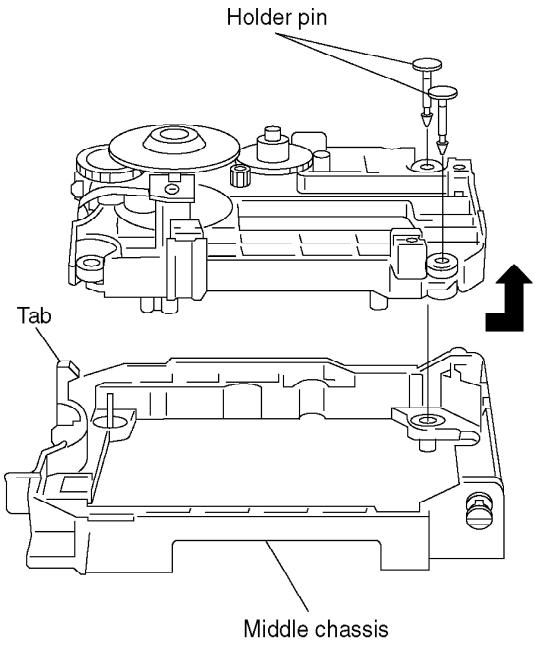


10.8. Disassembling the Middle Chassis

1. Remove the holder pins.

2. Remove the tab.

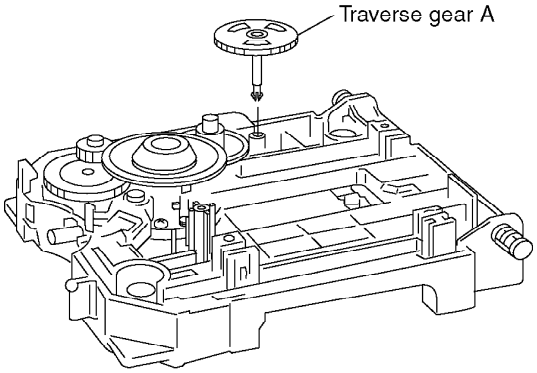
3. It lifts while pulling it in the direction of the arrow.



10.9. Disassembling the Traverse Gear A

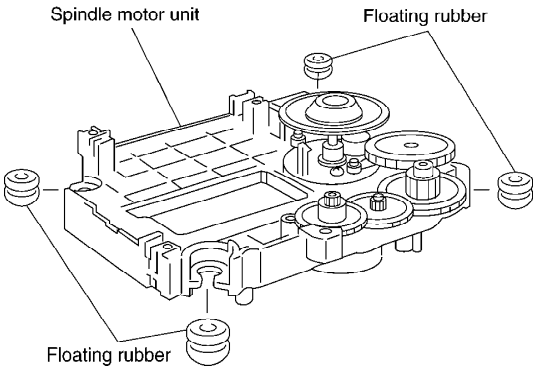
1. Unscrew the screw.

2. Remove the traverse gear A.



10.10. Disassembling the Spindle Motor Unit

1. Remove the floating rubbers.



11. ADJUSTMENT PROCEDURES

11.1. Service Tools and Equipment

Application	Name	Number
Tilt adjustment	DVD test disc	DVDT-S15 or DVDT-S01
	Hex wrench	Available on sales route.
Inspection	Extension cable (module P.C.B. to terminal P.C.B.)	JGS0116
	Extension cable (module P.C.B. to terminal P.C.B.)	JGS0098
Others	Grease 1	RFKXGAK152
	Grease 2	RFKXPG641
	Oil (1)	RFKXGA1280
Confirmation	CD test disc	PVCD-K06 or any other commercially available disc
	VCD test disc	PVCD-K06 or any other commercially available disc
	Recovery disc	RFKZD5TR006

11.2. Important points in adjustment

11.2.1. Important points in optical adjustment

- Before starting optical adjustment, be sure to take anti-static measures.

- Optical pickup tilt adjustment is needed after replacement of the following components.

1. Optical pickup unit

2. Spindle motor unit

3. Optical pickup peripheral parts (such as rail)

Notes

Adjustment is generally unnecessary after replacing other parts of the traverse unit. However, make adjustment if there is a noticeable degradation in picture quality. Optical adjustments cannot be made inside the optical pickup. Adjustment isgenerally unnecessary after replacing the traverse unit.

11.2.2. Important points in electrical adjustment

- Follow the adjustment procedures described in this Manual.

11.3. Storing and Handling Test Discs

- Surface precision is vital for DVD test discs. Be sure to store and

handle them carefully.

1. Do not place discs directly onto the workbench, etc., after use.
2. Handle discs carefully in order to maintain their flatness. Place them into their case after use and store them vertically. Store discs in a cool place where they are not exposed to direct sunlight or air from air conditioners.
3. Accurate adjustment will not be possible if the disc is warped when placed on a surface made of glass, etc. If this happens, use a new test disc to make optical adjustments.
4. If adjustment is done using a warped disc, the adjustment will be incorrect and some discs will not be playable.

11.4. Optical adjustment

11.4.1. Optical pickup tilt adjustment

Measurement point	Adjustment point	Mode	Disc
	Tangential adjustment screw Tilt adjustment screw	T01 (inner periphery) play T43 (outer periphery) play	DVDR-S15 or DVD
Measuring equipment		Adjustment value	
None (Main unit display for servicing is used.)		Adjust to the minimum jitter value.	

11.4.1.1. Adjustment procedure

1. While pressing PAUSE and OPEN/CLOSE buttons on the main unit, press "5" on the remote control unit.
2. Confirm that "J_xxx_yyy_zz" is shown on the front display.

For your information:
"yyy" and "zz" shown to the right have nothing to do with the jitter value. "yyy" is the error counter, while "zz" is the focus drive value.

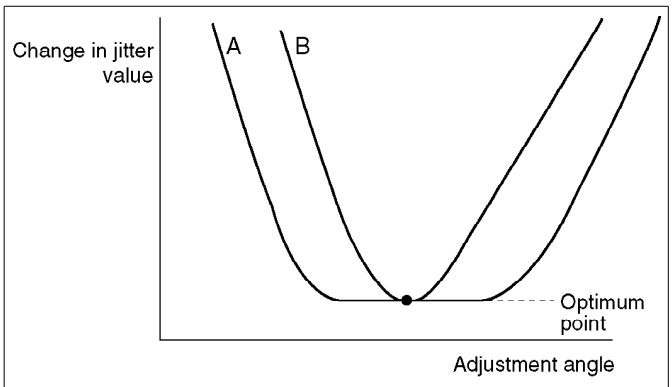
Note:
Jitter value appears on the front display.

3. Play test disc T01 (inner periphery).
4. Adjust tangential adjustment screw so that the jitter value is minimized.

5. Play test disc T43 (outer periphery).
6. Adjust tilt adjustment screw 1 so that the jitter value is minimized.
7. Play test disc T43 (outer periphery).
8. Adjust tilt adjustment screw 2 so that the jitter value is minimized.
9. Repeat adjusting tilt adjustment screws 1 and 2 alternately until the jitter value is minimized.

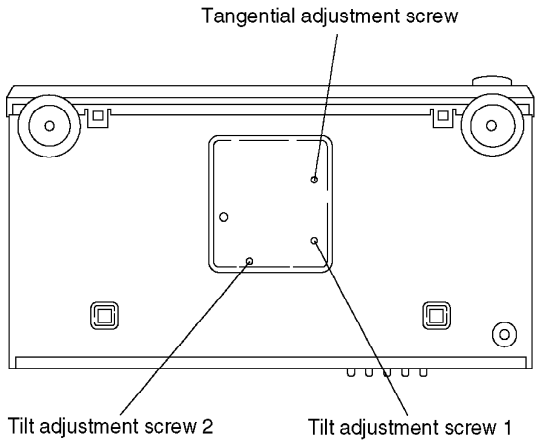
11.4.1.2. Important points

1. Make tangential adjustment first, and then make tilt adjustment.
2. Repeat adjusting two or three times to find the optimum point.
3. Finish the procedure with tilt adjustment.



Jitter value depends on the model:

1. If the jitter value changes like B, the optimum point is easy to find.
2. If the jitter value changes like A, set the optimum point near the middle.



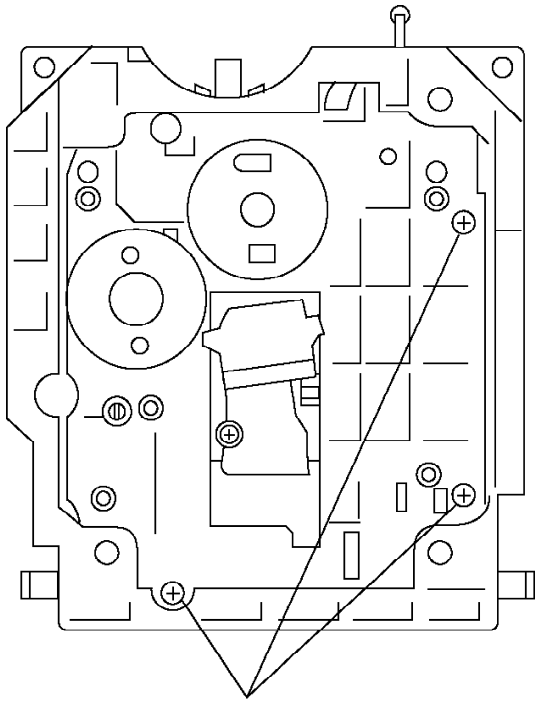
11.4.1.3. Check after adjustment

Play test disc or any other disc to make sure there is no picture degradation in the inner, middle and outer peripheries, and no audio skipping. After adjustment is finished, lock each adjustment

screw in position using screw lock.

11.4.1.4. Procedure for screw lock

1. **After adjustment, remove top cover, tray, clamper base and traverse unit in this sequence.**
2. **Lay the traverse unit upside down, and fix adjustment screw with screw lock.**
3. **After fixing, reassemble traverse unit, clamper base, tray and top cover.**



12. Abbreviations

INITIAL/LOGO		ABBREVIATIONS
A	A0~UP	ADDRESS
	ACLK	AUDIO CLOCK
	AD0~UP	ADDRESS BUS
	ADATA	AUDIO PES PACKET DATA
	ALE	ADDRESS LATCH ENABLE
	AMUTE	AUDIO MUTE
	AREQ	AUDIO PES PACKET REQUEST
	ARF	
	ASI	AUDIO RF
	ASO	SERVO AMP INVERTED INPUT
	ASYNC	SERVO AMPOUTPUT
		AUDIO WORD DISTINCTION SYNC
B	BCK	BIT CLOCK (PCM)
	BCKIN	BIT CLOCK INPUT
	BDO	BLACK DROP OUT
	BLKCK	SUB CODE BLOCK CLOCK
	BOTTOM	CAP. FOR BOTTOM HOLD
	BYP	BYPATH
	BYTCK	BYTE CLOCK
C	CAV	CONSTANT ANGULAR
	CBDO	VELOCITY
	CD	CAP. BLACK DROP OUT
	CDSCK	COMPACT DISC
	CDSRDATA	CD SERIAL DATA CLOCK
		CD SERIAL DATA
	CDRF	CD RF (EFM) SIGNAL
	CDV	COMPACT DISC-VIDEO
	CHNDATA	CHANNEL DATA
	CKSL	SYSTEM CLOCKSELECT
	CLV	CONSTANT LINEAR VELOCITY
	COFTR	CAP. OFF TRACK
	CPA	CPU ADDRESS
	CPCS	CPU CHIP SELECT
	CPDT	CPU DATA
	CPUADR	CPU ADDRESS LATCH
	CPUADT	CPU ADDRESS DATA BUS
	CPUIRQ	CPU INTERRUPT REQUEST
	CPRD	CPU READ ENABLE
	CPWR	CPU WRITE ENABLE
	CS	CHIPSELECT
	CSYNCIN	COMPOSITE SYNC IN
	CSYNCOUT	COMPOSITE SYNC OUT

INITIAL/LOGO		ABBREVIATIONS
D	DACCK	D/A CONVERTER CLOCK
	DEEMP	DEEMPHASIS BIT ON/OFF
	DEMPH	DEEMPHASIS SWITCHING
	DIG0~UP	FL DIGIT OUTPUT
	DIN	DATA INPUT
	DMSRCK	DM SERIAL DATA READ
	DMUTE	CLOCK
	DO	DIGITAL MUTE CONTROL
	DOUT0~UP	DROP OUT
		DATAOUTPUT
	DRF	DATA SLICE RF (BIAS)
	DRPOUT	DROP OUT SIGNAL
	DREQ	DATA REQUEST
	DRESP	DATA RESPONSE
	DSC	DIGITAL SERVO CONTROLLER
	DSLF	
	DVD	DATA SLICE LOOP FILTER
		DIGITAL VIDEO DISC

INITIAL/LOGO		ABBREVIATIONS
E	EC	ERROR TORQUE CONTROL
	ECR	ERROR TORQUE CONTROL
		REFERENCE
	ENCSEL	ENCODER SELECT
	ETMCLK	EXTERNAL M CLOCK (81MHz/
	ETSCLK	40.5MHz)
		EXTERNAL S CLOCK (54MHz)
F	FBAL	FOCUS BALANCE
	FCLK	FRAME CLOCK
	FE	FOCUS ERROR
	FFI	FOCUS ERROR AMP
	FEO	INVERTED INPUT
	FG	FOCUS ERROR AMP OUTPUT
	FSC	FREQUENCY GENERATOR
	FSCK	FREQUENCY SUB CARRIER
		FS (384 OVER SAMPLING)
		CLOCK
G	GND	COMMON GROUNDING
		(EARTH)
H	HA0~UP	HOST ADDRESS
	HD0~UP	HOST DATA
	HINT	HOST INTERRUPT
	HRXW	HOST READ/WRITE

INITIAL/LOGO		ABBREVIATIONS
I	IECOUT	IEC958 FORMAT DATA OUTPUT
	IPFRAG	INTERPOLATION FLAG
	IREF	I (CURRENT) REFERENCE
	ISEL	INTERFACE MODE SELECT
L	LDON	LASER DIODE CONTROL
	LPC	LASER POWER CONTROL
	LRCK	L CH/R CH DISTINCTION CLOCK
M	MA0~UP	MEMORY ADDRESS
	MCK	MEMORY CLOCK
	MCKI	MEMORY CLOCK INPUT
	MCLK	MEMORY SERIAL COMMAND CLOCK
	MDATA	MEMORY SERIAL COMMAND DATA
	MDQ0~UP	MEMORY DATA INPUT/OUTPUT
	MDQM	MEMORY DATA I/O MASK
	MLD	MEMORYSERIAL COMMAND LOAD
	MPEG	MOVING PICTURE EXPERTS GROUP
O	ODC	OPTICAL DISC CONTROLLER
	OFTR	OFF TRACKING
	OSCI	OSCILLATOR INPUT
	OSCO	OSCILLATOR OUTPUT
	OSD	ON SCREEN DISPLAY
P	P1~UP	PORT
	PCD	CD TRACKING PHASE DIFFERENCE
	PCK	PLL CLOCK
	PDVD	DVD TRACKING PHASE DIFFERENCE
	PEAK	CAP. FOR PEAK HOLD
	PLLCLK / PLLOK	CHANNEL PLL CLOCK PLL LOCK
	PWMCTL	PWM OUTPUT CONTROL
	PWMDA	PULSE WAVE MOTOR DRIVEA
	PWMOA, B	PULSE WAVE MOTOR OUT A, B

INITIAL/LOGO		ABBREVIATIONS
R	RE	READ ENABLE
	RFENV	RF ENVELOPE
	RFO	RF PHASE DIFFERENCE
	RS	OUTPUT
	RSEL	(CD-ROM) REGISTER SELECT
	RST	RF POLARITY SELECT
	RSV	RESET
		RESERVE
S	SBI0, 1	SERIAL DATA INPUT
	SBO0	SERIAL DATA OUTPUT
	SBT0, 1	SERIAL CLOCK
	SCK	SERIAL DATA CLOCK
	SCKR	AUDIO SERIAL CLOCK
	SCL	RECEIVER
	SCLK	SERIAL CLOCK
	SDA	SERIAL CLOCK
	SEG0~UP	SERIAL DATA
	SELCLK	FL SEGMENT OUTPUT
	SEN	SELECTCLOCK
	SIN1, 2	SERIAL PORT ENABLE
	SOUT1, 2	SERIAL DATA IN
	SPDI	SERIAL DATA OUT
	SPDO	SERIAL PORT DATA INPUT
	SPEN	SERIAL PORT DATA OUTPUT
	SPRCLK	SERIAL PORT R/W ENABLE
	SPWCLK	SERIAL PORT READ CLOCK
	SQCK	SERIAL PORT WRITE CLOCK
	SQCX	SUB CODE Q CLOCK
	SRDATA	SUBCODE Q DATA READ
	SRMADR	CLOCK
	SRMDT0~7	SERIAL DATA
		SRAM ADDRESS BUS
	SS	SRAM DATA BUS 0~7
	STAT	START/STOP
	STCLK	STATUS
	STD0~UP	STREAM DATA CLOCK
	STENABLE	STREAM DATA
		STREAM DATA INPUT ENABLE
	STSEL	STREAM DATA POLARITY
	STVALID	SELECT
	SUBC	STREAM DATAVALIDITY
	SBCK	SUB CODE SERIAL
	SUBQ	SUB CODE CLOCK
	SYSCLK	SUB CODE Q DATA

	SYSCLK	SYSTEM CLOCK

INITIAL/LOGO		ABBREVIATIONS
T	TE	TRACKING ERROR
	TIBAL	BALANCE CONTROL
	TID	BALANCE OUTPUT 1
	TIN	BALANCE INPUT
	TIP	BALANCE INPUT
	TIS	BALANCE OUTPUT 2
	TPSN	OP AMP INPUT
	TPSO	OP AMP OUTPUT
	TPSP	OP AMP INVERTED INPUT
	TRCRS	TRACK CROSSSIGNAL
	TRON	TRACKING ON
	TRSON	TRAVERSE SERVO ON

INITIAL/LOGO		ABBREVIATIONS
V	VBLANK	V BLANKING
	VCC	COLLECTOR POWER SUPPLY VOLTAGE
	VCDCONT	VIDEO CD CONTROL (TRACKING BALANCE)
	VDD	DRAIN POWER SUPPLY VOLTAGE
	VFB	VIDEO FEED BACK
	VREF	VOLTAGE REFERENCE
	VSS	SOURCE POWER SUPPLYVOLTAGE
W	WAIT	BUS CYCLE WAIT
	WDCK	WORD CLOCK
	WEH	WRITE ENABLE HIGH
	WSR	WORD SELECT RECEIVER

INITIAL/LOGO		ABBREVIATIONS
X	X	X' TAL
	XALE	X ADDRESS LATCH ENABLE
	XAREQ	X AUDIO DATA REQUEST
	XCDROM	X CD ROM CHIP SELECT
	XCS	X CHIP SELECT
	XCSYNC	X COMPOSITE SYNC
	XDS	X DATA STROBE
	XHSYNCO	X HORIZONTAL SYNC OUTPUT
	XHINT	XH INTERRUPTREQUEST
	XI	X' TAL OSCILLATOR INPUT
	XINT	X INTERRUPT
	XMW	X MEMORY WRITE ENABLE
	XO	X' TAL OSCILLATOR OUTPUT
	XRE	X READ ENABLE
	XSRMCE	X SRAM CHIP ENABLE
	XSRMOE	X SRAM OUTPUT ENABLE
	XSRMWE	X SRAM WRITE ENABLE
	XVCS	X V-DEC CHIPSELECT
	XVDS	X V-DEC CONTROL BUS
	XVSYNCO	STROBE X VERTICAL SYNC OUTPUT

13. Voltage Chart

13.1. Power P.C.B.

13.2. Terminal P.C.B.

13.3. Module P.C.B.

13.4. Intermediate P.C.B.

13.5. FRONT 1 P.C.B.

14. BLOCK DIAGRAM

14.1. OVERALL BLOCK DIAGRAM

14.2. POWER BLOCK DIAGRAM

14.3. SERVO BLOCK DIAGRAM

14.4. VIDEO BLOCK DIAGRAM

14.5. AUDIO BLOCK DIAGRAM

15. SCHEMATIC DIAGRAM

15.1. INTERCONNECTION SCHEMATIC DIAGRAM

15.2. POWER SECTION (POWER P.C.B. (1/2)) SCHEMATIC DIAGRAM

15.3. OPERATION & FL SECTION (POWER P.C.B. (2/2)) SCHEMATIC DIAGRAM

15.4. VIDEO OUT SECTION (TERMINAL P.C.B. (1/3)) SCHEMATIC DIAGRAM

15.5. AUDIO OUT 1 SECTION (TERMINAL P.C.B. (2/3)) SCHEMATIC DIAGRAM

15.6. AUDIO OUT 2 SECTION (TERMINAL P.C.B. (3/3)) SCHEMATIC DIAGRAM

15.7. NODC SECTION (MODULE P.C.B. (1/7)) SCHEMATIC DIAGRAM

15.8. AV DECORDER SECTION (MODULE P.C.B. (2/7)) SCHEMATIC DIAGRAM

15.9. PROGRESSIVE SECTION (MODULE P.C.B. (3/7)) SCHEMATIC DIAGRAM

15.10. VIDEO D/A CONVERTER SECTION (MODULE P.C.B. (4/7)) SCHEMATIC DIAGRAM

15.11. AUDIO D/A CONVERTER SECTION (MODULE P.C.B. (5/7)) SCHEMATIC DIAGRAM

15.12. WMA SECTION (MODULE P.C.B. (6/7)) SCHEMATIC DIAGRAM

15.13. CPU SECTION (MODULE P.C.B. (7/7)) SCHEMATIC DIAGRAM

15.14. INTERMEDIATE SCHEMATIC DIAGRAM

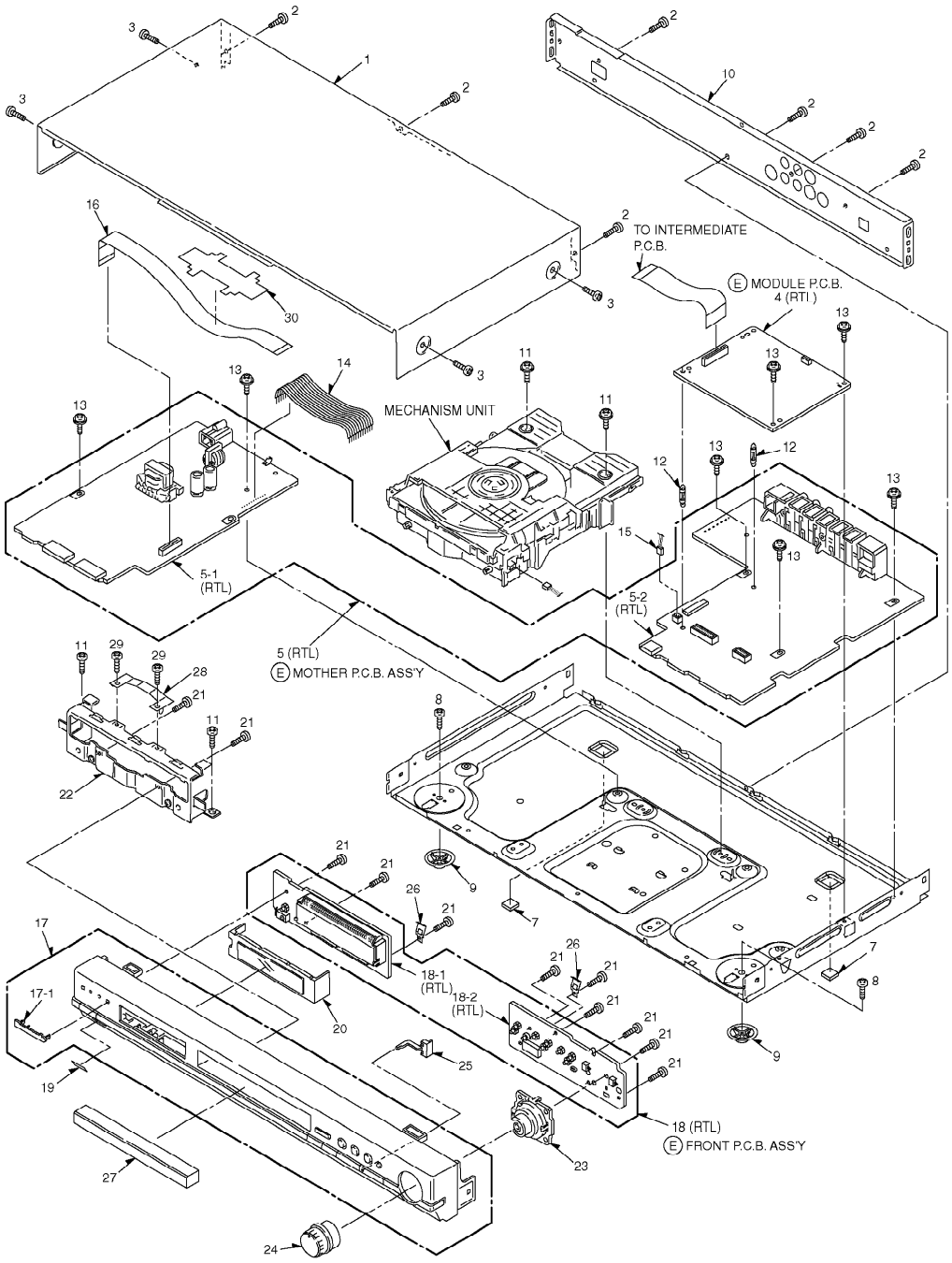
15.15. FRONT 1 AND FRONT 2 SCHEMATIC DIAGRAM

16. PRINT CIRCUIT BOARD

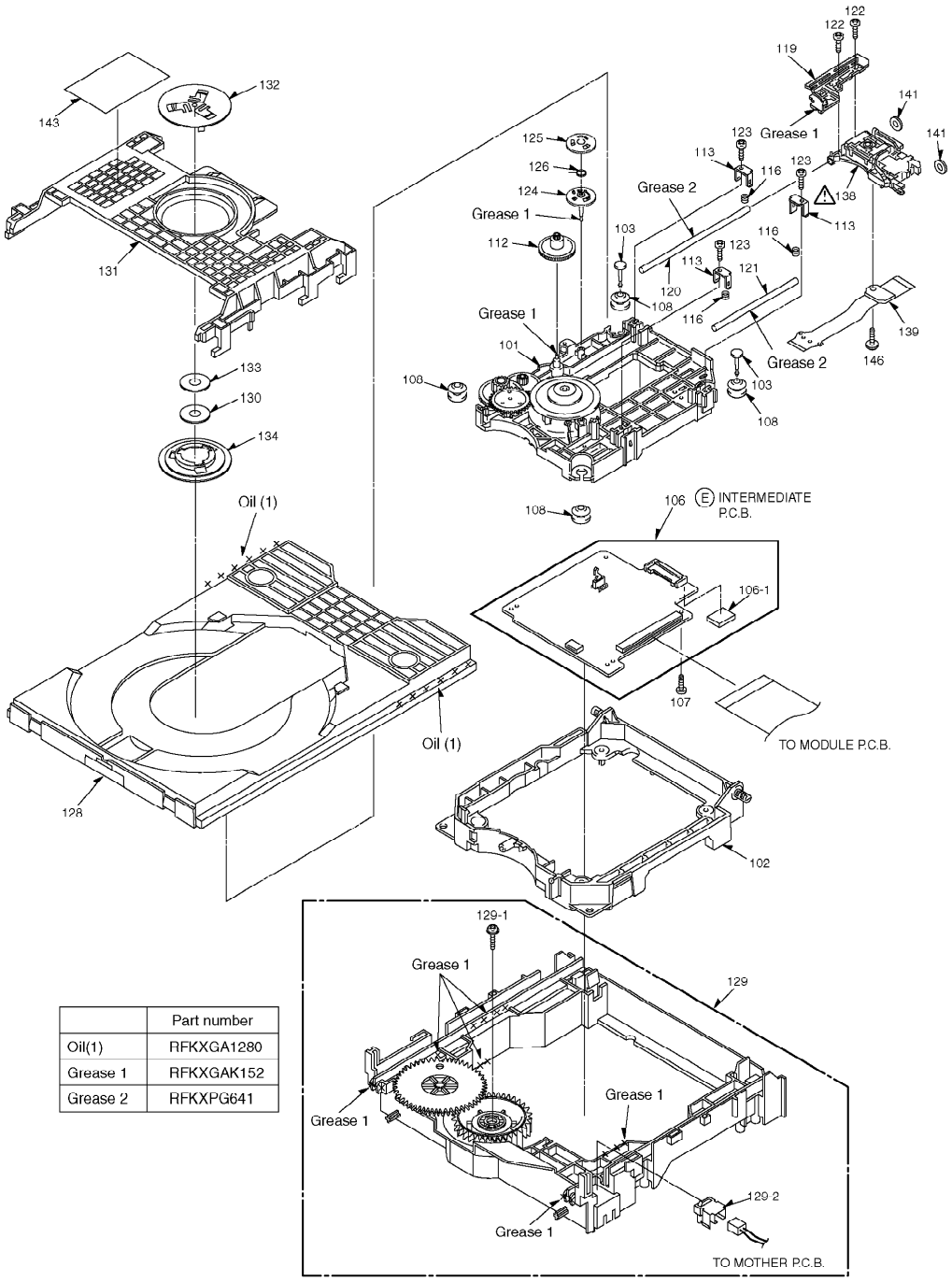
16.1. POWER P.C.B.

16.2. TERMINAL P.C.B.

16.3. POWER P.C.B. AND TERMINAL P.C.B. ADDRESS

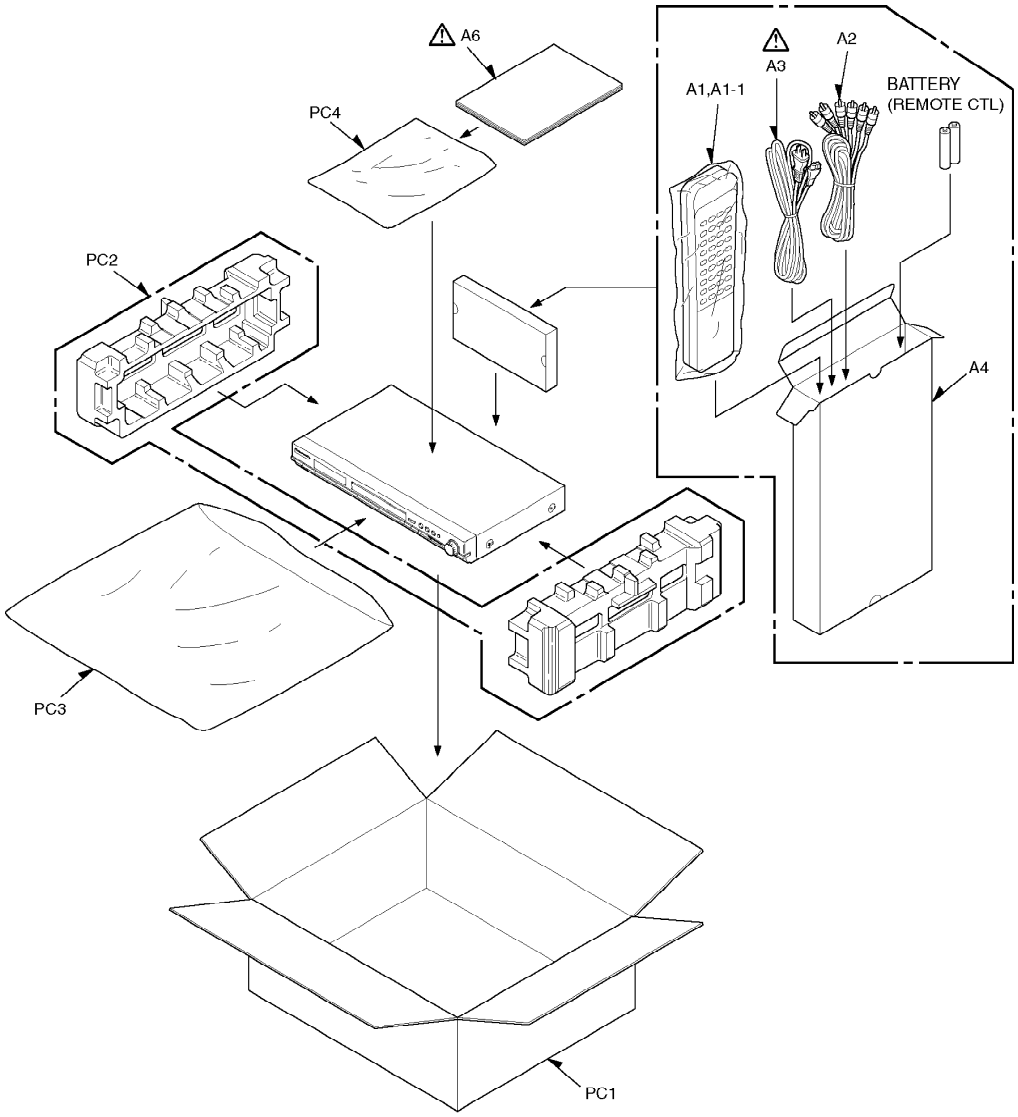


17.2. Mechanism Section Exploded View



	Part number
Oil(1)	RFKXGA1280
Grease 1	RFKXGAK152
Grease 2	RFKXPG641

17.3. Packing & Accessories Section Exploded View



18. REPLACEMENT PARTS LIST

Notes:
***Important safety notice:**
Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufactures specified parts shown in the parts list.
***Warning: This product uses a laser diode. Refer to caution statements.**
***ACHTUNG: Die lasereinheit nicht zerlegen. Die lasereinheit darf nur gegen enic vom hersteller spezifizierte einheit ausgetauscht werden.**
***Capacity values are in microfarads (μ F) unless specified otherwise, P=Pico-farads (pF), F= Farads (F).**
***Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000k (OHM).**
***The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.**

***"<IA>-<IB>", marks in Remarks indicate languages of instruction manuals.[<IA>:English, <IB>: Canadian French.]**
***All parts that are supplied by S.P.C..**

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	RKM0468-K	TOP PANEL	1	⚠
1	RKM0468-S	TOP PANEL	1	⚠
2	VHD0690	SCREW	7	
3	VHD1041	SCREW	4	(K)
3	VHD1094	SCREW	4	(S)
4	REP3385A	MODULE P.C.B.	1	(RTL)
5	REP3389A	MOTHER P.C.B.ASS'Y	1	(RTL)
5-1	REP3389AA	POWER P.C.B.	1	(RTL)
5-2	REP3389AB	TERMINAL P.C.B.	1	(RTL)
7	RKA0137-K	FOOT RUBBER	2	
8	XTV3+6G	SCREW	2	
9	RKA0132-K	FOOT	2	
10	RGR0330A-A	REAR PANEL	1	⚠
11	XTV3+8J	SCREW	4	
12	RMR1359-W	PCB SUPPORT	2	
13	VHD1403	SCREW	7	
14	REZ1462	FFC(50P)	1	
15	REX1057	CONNECTOR CABLE(2P)	1	
16	REZ1463	FFC(22P)	1	
17	RYP1132-K	FRONT PANEL 1 ASS'Y	1	(K)
17	RYP1132-S	FRONT PANEL 1 ASS'Y	1	(S)
17-1	VGB0298	PANASONIC BADGE	1	
18	REP3390A	FRONT P.C.B. ASS'Y	1	(RTL)
18-1	REP3390AA	FRONT1 P.C.B.	1	(RTL)
18-2	REP3390AB	FRONT2 P.C.B.	1	(RTL)
19	RKW0652-K	REMOTE CONTROL WINDOW	1	(K)
19	RKW0652-S	REMOTE CONTROL WINDOW	1	(S)
20	RKW0695-R	FL WINDOW	1	
21	XTBS26+10J	SCREW	11	
22	RMA1573	FRONT ANGLE	1	
23	RXQ0755	SHUTTLE BASE ASS'Y	1	
24	RGW0391-K	SHUTTLE KNOB	1	(K)
24	RGW0391-S	SHUTTLE KNOB	1	(S)
25	RGL0595-W	LIGHTING PIECES(A)	1	
26	RMC0468	EARTH PLATE B	2	
27	RGK1533-K	TRY ORNAMENT	1	(K)
27	RGK1533-S	TRY ORNAMENT	1	(S)
28	RMC0515	EARTH PLATE C	1	
29	XTB3+4F	SCREW	2	
30	RGQ0341-K	FFC SHEET	1	
101	RXQ0745B	SPINDLE MOTOR ASS'Y	1	
102	RMR1323-K	MIDDLE CHASSIS	1	
103	RMS0712	FIXED PIN	2	
106	REP3091B-1N	INTERMEDIATE P.C.B.	1	(RTL)
106-1	RMG0558-K	PCB RUBBER	1	
107	RHD20060	SCREW	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
108	RMG0545-A	FLOATING RUBBER	4	
112	RDG0499	TRAVERSE GEAR(A)	1	
113	RMC0415	ADJUST SPRING HOLDER 1	3	
116	RME0320	ADJUST SPRING	3	
119	RMM0234	TRAVERSE DRIVE RACK	1	
120	RMS0710	GUIDE SHAFT(1)	1	
121	RMS0711	GUIDE SHAFT(2)	1	
122	RHD17036	SCREW	2	
123	VHD1224	SCREW	3	
124	RDG0500	TRAVERSE GEAR(B)	1	
125	RDG0501	TRAVERSE GEAR(C)	1	
126	RME0319	TRAVERSE GEAR SPRING	1	
128	RGQ0280-K3	TRAY	1	
129	RXQ0727	MECHA CHASSIS UNIT	1	
129-1	XTW3+12S	SCREW	1	
129-2	RSH1A049-U	OPEN SWITCH	1	K0F111E00093
129-3	RDG0496	CAM GEAR	1	
129-4	RDG0497	DRIVE GEAR	1	
129-5	RMK0470	MECHA CHASSIS	1	
130	JSM0048	MAGNET	1	
131	RMR1445-K	CLAMP PLATE	1	
132	RMR1447-X	MAGNET HOLDER	1	
133	XWG6FFY	WASHER	1	
134	RMR1446-X	CLAMPER	1	
138	RAF3023A	OPTICAL PICK-UP	1	⚠
139	RJB2308A	INTERFACE FPC	1	
141	RMG0561-T	CUSHION RUBBER	1	
143	RQLS0233	LASER CAUTION LABEL	1	⚠
146	RHD14095	SCREW	1	
A1	N2QAJB000043	REMOTE CONTROL ASS'Y	1	
A1-1	HTR028352002	BATTERY COVER	1	
A2	VJA0788	A/V CORD	1	K1EA06CA0002
A3	RJA0065-A	AC CORD	1	K2CB2CB00006 ⚠
A4	RPQF0237	ACCESSORY BOX	1	
A6	RQT6526-P	OPERATING INSTRUCTIONS	1	<IA> ⚠
A6	RQT6527-C	OPERATING INSTRUCTIONS	1	<IB> ⚠
C1001,02	ECQU2A683MLC	0.068U	2	⚠
C1003	VCK0299E102	CERAMIC CAPACITOR	1	F1BAF1020005 ⚠
C1005	VCK0299E222	CERAMIC CAPACITOR	1	F1BAF2220006 ⚠
C1011,12	ECA2EHG330B	250V 33U	2	
C1021	VCK0266K471T	CERAMIC CAPACITOR	1	F1B2H4710002
C1031	VCK0266K182T	CERAMIC CAPACITOR	1	F1B2H1820001
C1041	ECQB1H223JF4	50V 0.022U	1	
C1051	ECQB1H104JF4	50V 0.1U	1	
C1052	ECQB1H683JF4	50V 0.068U	1	
C1053	ECQB1H104JF4	50V 0.1U	1	
C1101	ECQV1H104JL2	50V 0.1U	1	
C1102	ECQB1H223JF4	50V 0.022U	1	
C1111	VCEA1AJH102B	10V 1000U	1	F2A1A102A013
C1112	VCEA1AJC102B	10V 1000U	1	F2A1A1020004
C1115	ECUV1E104ZFV	25V 0.1U	1	F1H1E104A030

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C1116	VCEA1AJC221B	10V 220U	1	F2A1A2210005
C1117	ECA0JM102	6.3V 1000U	1	
C1121	VCEA1AJH102B	10V 1000U	1	F2A1A102A013
C1125	ECA0JM102	6.3V 1000U	1	
C1131	VCEA1EJH181B	25V 180U	1	F2A1E1810001
C1133	VCEA1EJC330B	25V 33U	1	F2A1E3300011
C1141	VCEA1EJH181B	25V 180U	1	F2A1E1810001
C1143	VCEA1EJC330B	25V 33U	1	F2A1E3300011
C1151	VCEA1EJH271B	25V 270U	1	F2A1E2710001
C1153	VCEA1EJC221B	25V 220U	1	F2A1E2210008
C1154	VCEA1CJC221B	16V 220U	1	F2A1C2210006
C1161	VCEA1HJH560B	50V 56U	1	F2A1H5600002
C1171	VCEA1AJH181B	10V 180U	1	F2A1A1810002
C2001	ECEV0JA331P	6.3V 330U	1	
C2002	ECEV0GA101SR	4V 100P	1	
C2003-11	ECJ1ZF1C104Z	16V 0.1U	9	
C2015	ECJ1ZF1C104Z	16V 0.1U	1	
C2021	ECJ1VB1H822K	50V 8200P	1	
C2022	ECUV1C393KBV	16V 0.039U	1	F1H1C393A065
C2023,24	ECJ1VB1H681K	50V 680P	2	
C2025,26	ECJ1VB1C473K	16V 0.047U	2	
C2027	ECJ1VB1H332K	50V 3300P	1	
C2028	ECJ1VB1H222K	50V 2200P	1	
C2029	ECJ1VB1H182K	50V 1800P	1	
C2030	ECJ1XB1H471K	50V 470P	1	
C2031	ECJ1VB1H332K	50V 3300P	1	
C2032	ECJ1VB1C473K	16V 0.047U	1	
C2033	ECJ1VB1H332K	50V 3300P	1	
C2034	ECJ1ZB1C104K	16V 0.1U	1	
C2035	ECJ1VB1C473K	16V 0.047U	1	
C2036	ECJ1VB1H332K	50V 3300P	1	
C2037	ECJ1VB1H102K	50V 1000P	1	
C2038	F1H1A474A025	10V 0.47U	1	
C2039	ECJ1VB1H103K	50V 0.01U	1	
C2041	F1J1A2250007	10V 2.2U	1	
C2042,43	ECJ1ZB1C104K	16V 0.1U	2	
C2044	ECJ1ZF1C104Z	16V 0.1U	1	
C2045	ECJ1VC1H101J	50V 100P	1	
C2046	ECUV1C333KBV	16V 0.033U	1	ECJ1VB1C333K
C2047	ECJ1ZB1C104K	16V 0.1U	1	
C2048	ECJ1VB1H332K	50V 3300P	1	
C2051	ECJ1VB1H103K	50V 0.01U	1	
C2052	ECJ1VB1H102K	50V 1000P	1	
C2061	F3F1A1060002	10V 10U	1	
C2062-64	ECJ1ZF1C104Z	16V 0.1U	3	
C2501	EEVFC0J221P	6.3V 220U	1	
C2502	ECEV1CA101WP	16V 100U	1	
C2503	ECEV1CA220WR	16V 22U	1	
C2504-08	ECJ1ZF1C104Z	16V 0.1U	5	
C2509	EEVFC1C100R	16V 10U	1	
C2511-13	ECJ1ZF1C104Z	16V 0.1U	3	
C3001	ECEV0JA331P	6.3V 330U	1	
C3002	EEVFC0J221P	6.3V 220U	1	
C3004	ECUV1A105ZFV	10V 1U	1	F1H1A1050002

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3005,06	ECJ1ZF1C104Z	16V 0.1U	2	
C3007,08	ECUV1A105ZFV	10V 1U	2	F1H1A1050002
C3009-11	ECJ1ZF1C104Z	16V 0.1U	3	
C3012,13	ECUV1A105ZFV	10V 1U	2	F1H1A1050002
C3014,15	ECJ1ZF1C104Z	16V 0.1U	2	
C3016	ECUV1A105ZFV	10V 1U	1	F1H1A1050002
C3017,18	ECJ1ZF1C104Z	16V 0.1U	2	
C3019,20	ECUV1A105ZFV	10V 1U	2	F1H1A1050002
C3021-23	ECJ1ZF1C104Z	16V 0.1U	3	
C3024	ECUV1A105ZFV	10V 1U	1	F1H1A1050002
C3025	ECJ1ZF1C104Z	16V 0.1U	1	
C3026	ECUV1A105ZFV	10V 1U	1	F1H1A1050002
C3027-29	ECJ1ZF1C104Z	16V 0.1U	3	
C3030	ECUV1A105ZFV	10V 1U	1	F1H1A1050002
C3031-35	ECJ1ZF1C104Z	16V 0.1U	5	
C3036	ECJ1VC1H220J	50V 22P	1	
C3041-45	ECJ1ZF1C104Z	16V 0.1U	5	
C3060-64	ECJ1ZF1C104Z	16V 0.1U	5	
C3065	ECUV1A105ZFV	10V 1U	1	F1H1A1050002
C3066	ECJ1ZF1C104Z	16V 0.1U	1	
C3080	ECEV0JA331P	6.3V 330U	1	
C3081,82	ECJ1ZF1C104Z	16V 0.1U	2	
C3083-86	F1H0J1050013	6.3V 1U	4	
C3087-89	ECJ1ZF1C104Z	16V 0.1U	3	
C3100	EEVHB0J101P	6.3V 100U	1	
C3101	ECJ1ZF1C104Z	16V 0.1U	1	
C3111	ECJ1ZF1C104Z	16V 0.1U	1	
C3116	ECJ1ZF1C104Z	16V 0.1U	1	
C3201	ECEV0GA101SR	4V 100P	1	
C3209,10	ECJ1ZF1C104Z	16V 0.1U	2	
C3215	ECJ1ZF1C104Z	16V 0.1U	1	
C3261	ECJ1ZF1C104Z	16V 0.1U	1	
C3501	ECA0JM221B	6.3V 220U	1	
C3502,03	ECJ1VF1H103Z	50V 0.01U	2	
C3504	ECJ1VB1H103K	50V 0.01U	1	
C3505-08	ECEA1CKA470	16V 47U	4	
C3509	ECA0JM102	6.3V 1000U	1	
C3510	ECEA0JKS101	6.3V 100U	1	
C3511	ECA0JM102	6.3V 1000U	1	
C3512	ECEA0JKS101	6.3V 100U	1	
C3513	ECA0JM102	6.3V 1000U	1	
C3514	ECEA0JKS101	6.3V 100U	1	
C3515,16	ECA0JM331B	6.3V 330U	2	
C3520	ECJ1VC1H101J	50V 100P	1	
C3522	ECJ1VC1H101J	50V 100P	1	
C3523	ECJ1VF1H103Z	50V 0.01U	1	
C3524	ECUV1H820JCV	50V 82P	1	ECJ1VC1H820J
C3531	ECJ1VB1H103K	50V 0.01U	1	
C3533,34	ECJ1VF1H103Z	50V 0.01U	2	
C3581,82	ECA1CM221	16V 220U	2	
C3701,02	ECEV0JA331P	6.3V 330U	2	
C3703-19	ECJ1ZF1C104Z	16V 0.1U	17	
C3720	ECEV0GA330SR	4V 33P	1	
C3721	ECJ1ZF1C104Z	16V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3722,23	ECUV1H100DCV	50V 10U	2	ECJ1VC1H100D
C3724	ECJ1ZF1C104Z	16V 0.1U	1	
C3731	F3F1A1060002	10V 10U	1	
C3732-43	ECJ1ZF1C104Z	16V 0.1U	12	
C3751-56	ECJ1ZF1C104Z	16V 0.1U	6	
C3757	ECJ1ZB1C104K	16V 0.1U	1	
C3758	F1H0J1050013	6.3V 1U	1	
C3759	ECJ1ZF1C104Z	16V 0.1U	1	
C3761-64	ECJ1ZF1C104Z	16V 0.1U	4	
C3766	ECJ1ZF1C104Z	16V 0.1U	1	
C3770	EEVHB0J101P	6.3V 100U	1	
C3771	ECJ1ZF1C104Z	16V 0.1U	1	
C4001,02	EEVHB0J330R	6.3V 33U	2	
C4003-15	ECJ1ZF1C104Z	16V 0.1U	13	
C4021	F1H0J1050013	6.3V 1U	1	
C4022	ECJ1VF1H103Z	50V 0.01U	1	
C4023	F1H0J1050013	6.3V 1U	1	
C4031	ECJ1ZF1C104Z	16V 0.1U	1	
C4041	ECJ1ZF1C104Z	16V 0.1U	1	
C4051	ECJ1ZF1C104Z	16V 0.1U	1	
C4061	ECJ1ZF1C104Z	16V 0.1U	1	
C4201	F2G0J331A015	6.3V 330U	1	
C4202	F3F1A1060002	10V 10U	1	
C4206	EEVHB0J330R	6.3V 33U	1	
C4207-10	ECJ1ZF1C104Z	16V 0.1U	4	
C4218	ECJ1ZF1C104Z	16V 0.1U	1	
C4222	F2G0J331A015	6.3V 330U	1	
C4303,04	ECA1CAD470XB	16V 47U	2	
C4312	ECA0JM102	6.3V 1000U	1	
C4313-15	ECUV1E104ZFV	25V 0.1U	3	F1H1E104A030
C4323,24	ECA1EM221	25V 220U	2	
C4336,37	ECJ1VC1H101J	50V 100P	2	
C4401	ECUV1C223KBV	16V 0.022U	1	ECJ1VB1C223K
C4405,06	ECUV1E104ZFV	25V 0.1U	2	F1H1E104A030
C4411	ECUV1C223KBV	16V 0.022U	1	ECJ1VB1C223K
C4414,15	ECA1CAK470XB	16V 47U	2	
C4418	ECA1ANK470XB	10V 47U	1	
C4423	ECUX1H102JCV	50V 1000P	1	
C4427	ECUX1H102JCV	50V 1000P	1	
C4429	ECUX1H102JCV	50V 1000P	1	
C4431,32	ECUV1E104ZFV	25V 0.1U	2	F1H1E104A030
C4433	ERJ3GEY0R00V	1/16W 0	1	
C4587-89	ECUV1E104ZFV	25V 0.1U	3	F1H1E104A030
C4781	F2A0J470A179	6V 47U	1	
C4782	ECUV1E104ZFV	25V 0.1U	1	F1H1E104A030
C5201,02	EEVHB1C100R	16V 10U	2	
C5203,04	ECJ1ZF1C104Z	16V 0.1U	2	
C5205-08	ECUX1H102JCV	50V 1000P	4	
C5211	EEVHB0J470R	6.3V 47U	1	
C5215	EEVHB0J470R	6.3V 47U	1	
C5221	ECJ1ZF1C104Z	16V 0.1U	1	
C5223	ECJ1ZF1C104Z	16V 0.1U	1	
C5224,25	ECJ1ZB1C104K	16V 0.1U	2	
C5231	ECJ1VC1H101J	50V 100P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C5232,33	ECJ1ZF1C104Z	16V 0.1U	2	
C5234	ECJ1VB1H222K	50V 2200P	1	
C5235	ECUV1H391JCV	50V 390P	1	F1H1H391A004
C5236	ECUX1H102JCV	50V 1000P	1	
C5237	ECJ1ZB1C104K	16V 0.1U	1	
C5238	ECUV1A224KBV	10V 0.22U	1	F1H1A224A001
C5239	ECJ1ZB1C104K	16V 0.1U	1	
C5240	ECUV1H561JCV	50V 560P	1	ECJ1VC1H561J
C5242	ECJ1VB1H472K	50V 4700P	1	
C5251	ECJ1ZF1C104Z	16V 0.1U	1	
C5252	F3K1A1060001	10V 10U	1	
C5253	ERJ3GEYJ472V	1/16W 4.7K	1	
C6001	ECEA1AKS221	10V 220U	1	
C6004	ECEA1HKS100	50V 10U	1	
C6005	ECUV1E104ZFV	25V 0.1U	1	F1H1E104A030
C6012	ECUV1E104ZFV	25V 0.1U	1	F1H1E104A030
C6031-34	ECJ1VF1H103Z	50V 0.01U	4	
C6061	ECUV1E104ZFV	25V 0.1U	1	F1H1E104A030
C6091	ECUV1E104ZFV	25V 0.1U	1	F1H1E104A030
C6092	ECEA0JKS470	6.3V 47U	1	
C6095	ECJ1VF1H103Z	50V 0.01U	1	
C6101	ECEA0JKS470	6.3V 47U	1	
C6201	EEVHB0J330R	6.3V 33U	1	
C6202-06	ECJ1ZF1C104Z	16V 0.1U	5	
C6211	ECJ1VC1H101J	50V 100P	1	
C6251	ECJ1ZB1C104K	16V 0.1U	1	
C6252	F3F1A1060002	10V 10U	1	
C6257	EEVHB0J101P	6.3V 100U	1	
C6301	ECJ1ZF1C104Z	16V 0.1U	1	
C6302	ECJ1ZB1C104K	16V 0.1U	1	
C6303-05	ECJ1ZF1C104Z	16V 0.1U	3	
C6501,02	EEVHB0J330R	6.3V 33U	2	
C6503-05	ECJ1ZF1C104Z	16V 0.1U	3	
C6511,12	ECJ1VC1H150J	50V 15P	2	
D1001	ENC471D5ATUB	DIODE	1	D4EA7471A001 ⚠
D1002	D4EA7361A002	DIODE	1	⚠
D1011	B0EBKT000002	DIODE	1	
D1031	VSD0002	DIODE	1	B0HAGR000005
D1041	AU01Z	DIODE	1	B0HAGM000006
D1051,52	MA165	DIODE	2	MA2C165
D1053	MAZ40360MF	DIODE	1	
D1054	AU01Z	DIODE	1	B0HAGM000006
D1101	MAZ70750AC	DIODE	1	
D1111	21DQ04FC4	DIODE	1	B0JAME000033
D1121	21DQ04FC4	DIODE	1	B0JAME000033
D1126	B0EAKL000031	DIODE	1	
D1131	11EQS06TA1	DIODE	1	B0JAMG000010
D1132	MA7150B-TR	DIODE	1	MAZ71500BC
D1141	11EQS06TA1	DIODE	1	B0JAMG000010
D1151,52	11EQS06TA1	DIODE	2	B0JAMG000010
D1161	AU01Z	DIODE	1	B0HAGM000006
D1162	MAZ80300HL	DIODE	1	
D1171	AK04	DIODE	1	B0JAME000037

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D1172	B0EAKL000031	DIODE	1	
D2001	MA2J11100L	DIODE	1	
D3051	D1FL20UF4063	DIODE	1	B0HCMM000001
D4301	MA8047M	DIODE	1	MAZ80470M
D5251	MA2J72800L	DIODE	1	
D6091	MA4039HTA	DIODE	1	MAZ40390HF
D6153	LNJ301MPUJAD	LED(GREEN)	1	
D6301	MA2SD2400L	DIODE	1	
DL6001	A2BB00000103	DISPLAY TUBE	1	
DZ1001	J0LE00000023	SURGE ABSORBER	1	⚠
F1001	K5D162AQ0005	FUSE	1	⚠
FC1001	REZ1461	FFC(15P)	1	
FL4201	F1H0J1050018	FILTER	1	
FL6251	F1H0J1050018	FILTER	1	
FL6253,54	F1H0J1050018	FILTER	2	
FL6255	VLF1491S104T	FILTER	1	F1J1E1040022
FP2001	K1MN50A00005	CONNECTOR(50P)	1	
FP5201	K1MN30B00098	CONNECTOR(30P)	1	
FP5202	K1MN50B00010	CONNECTOR(50P)	1	
FP6001	RJS2A5622	CONNECTOR(22P)	1	K1MN22A00027
FP6002	K1MN22B00043	CONNECTOR(22P)	1	
IC1101	C0DAEMZ00001	IC	1	
IC1125	C0DAEZG00010	IC	1	
IC1151	C0CBCHG00003	IC	1	
IC2001	MN677203NP1	IC	1	
IC2061	C3ABKG000057	IC	1	
IC2501	C0GBG0000033	IC	1	
IC3001	MN677533MP	IC	1	
IC3061	C3ABMG000103	IC	1	
IC3261	C0JBAR000290	IC	1	
IC3501	C9ZB00000377	IC	1	
IC3581	NJM78M05FA	IC	1	C0CAADE00007
IC3701	C1AB00001554	IC	1	
IC3731	C3ABPJ000017	IC	1	
IC3751	C1AB00001499	IC	1	
IC4001	TMS320C5410A	IC	1	
IC4021	C0CBCAC00025	IC	1	
IC4031	C0JBAR000294	IC	1	
IC4041	AHC1G08HDCK	IC	1	C0JBAA000260
IC4051	AHC1G08HDCK	IC	1	C0JBAA000260
IC4061	C0JBAF000367	IC	1	
IC4201	C0FBBK000030	IC	1	
IC4301	C0ABBB000118	IC	1	
IC4403	C0ABBB000118	IC	1	
IC5201	AN8708FHK	IC	1	
IC6001	MN101C35DCW	IC	1	
IC6011	PST9327UR	IC	1	C0EBE0000094

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC6101	B3RAD0000033	IC	1	
IC6201	MN102H60GFC	IC	1	
IC6251	C0DBCGE00002	IC	1	
IC6301	PST596JNR	IC	1	C0EBE0000070
IC6302	RFKFRP62H080	IC	1	
IC6303	C3EBFC000030	IC	1	
IC6501	C1DB00000582	IC	1	
JK4501	K2YZ09000006	JACK,VIDEO OUT	1	
K3001	ERJ3GEY0R00A	1/16W 0	1	
K3011-13	ERJ3GEY0R00A	1/16W 0	3	
K3106	ERJ3GEY0R00A	1/16W 0	1	
K3112	ERJ3GEY0R00A	1/16W 0	1	
K3117	ERJ3GEY0R00A	1/16W 0	1	
K3201	ERJ3GEY0R00A	1/16W 0	1	
K4011,12	ERJ3GEY0R00A	1/16W 0	2	
K4022	ERJ3GEY0R00A	1/16W 0	1	
K4024	ERJ3GEY0R00A	1/16W 0	1	
K4026	ERJ3GEY0R00A	1/16W 0	1	
K6055	ERJ3GEY0R00V	1/16W 0	1	
K6201	ERJ3GEY0R00A	1/16W 0	1	
K6221,22	ERJ3GEY0R00A	1/16W 0	2	
K6254	ERJ6GEY0R00V	1/10W 0	1	
K6301	ERJ3GEY0R00A	1/16W 0	1	
L1001	ELF15N005A	NOISE FILTER	1	⚠
L1111	VLQ0611K100T	COIL 10UH	1	G0A101H00004
L1115	ELELN100KA	INDUCTOR 10UH	1	
L1131	VLQEL05S330K	COIL 33UH	1	G0C330KA0004
L1141	VLQEL05S330K	COIL 33UH	1	G0C330KA0004
L1151	VLQ0611K220T	COIL 22UH	1	G0A220H00005
L2001	VLQ0855K100T	COIL 10UH	1	G1C100K00020
L3091,92	VLQ0855K100T	COIL 10UH	2	G1C100K00020
L3201	ELELN100KA	INDUCTOR 10UH	1	
L3501	G0C220JA0019	COIL 22UH	1	
L3503	ELJFCR39KF	COIL 0.39UH	1	
L3505	ELJFCR68KF	COIL 0.68UH	1	
L3507	ELJFCR68KF	COIL 0.68UH	1	
L3701	G1C220JA0010	COIL	1	
L4211	VLQ0855K220T	COIL 22UH	1	G1C220KA0038
L4301	G0C101JA0019	COIL	1	
L5201	ELJEA100KF	COIL 10UH	1	
L5251	ELJEA100KF	COIL 10UH	1	
L6001	G0C101JA0019	COIL	1	
L6101	G0C101JA0019	COIL	1	
L6501,02	VLQ0855K220T	COIL 22UH	2	G1C220KA0038
LB2001	J0JHC0000045	COIL	1	
LB2011-29	J0JBC0000015	COIL	19	
LB2030,31	ERJ3GEY0R00A	1/16W 0	2	
LB2032,33	J0JBC0000015	COIL	2	
LB2034,35	ERJ3GEY0R00A	1/16W 0	2	
LB2036-39	J0JBC0000015	COIL	4	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
LB2040	ERJ3GEY0R00A	1/16W 0	1	
LB2041	J0JBC0000015	COIL	1	
LB2042,43	J0JHC0000045	COIL	2	
LB3001,02	J0JHC0000045	COIL	2	
LB3011	J0JCC0000077	COIL	1	
LB3201	ERJ3GEY0R00A	1/16W 0	1	
LB3202-04	ERJ3GEYJ101V	1/16W 100	3	
LB3206-08	ERJ3GEY0R00A	1/16W 0	3	
LB3210	ERJ3GEY0R00A	1/16W 0	1	
LB3531-36	J0JBC0000015	COIL	6	
LB3701,02	J0JHC0000045	COIL	2	
LB4200,01	J0JBC0000015	COIL	2	
LB4202-06	ERJ3GEY0R00A	1/16W 0	5	
LB4214-17	ERJ3GEY0R00A	1/16W 0	4	
LB5201	G1CYYYZ00003	COIL	1	
LB5202	VLP0323A601R	COIL	1	J0JCC0000062
LB5203,04	VLP0155-T	COIL	2	J0JCC0000119
LB5205,06	VLP0323A601R	COIL	2	J0JCC0000062
LB6001,02	ERJ3GEY0R00V	1/16W 0	2	
LB6201	J0JBC0000015	COIL	1	
LB6202	VLP0155-T	COIL	1	J0JCC0000119
LB6501,02	J0JBC0000015	COIL	2	
LB6512-14	VLP0155-T	COIL	3	J0JCC0000119
LB6515	J0JCC0000077	COIL	1	
LR1041	J1ZZA0000001	COIL	1	
P1001	K2AB2B000002	AC INLET	1	⚠
P6005	VJP3233A002	CONNECTOR(MALE) 2P	1	K1KA02A00010
PC1	RPG6092	PACKING CASE	1	(P-K)
PC1	RPG6093	PACKING CASE	1	(P-S)
PC1	RPG6094	PACKING CASE	1	(PC-K)
PC1	RPG6095	PACKING CASE	1	(PC-S)
PC2	RPN1547	CUSHION	1	
PC3	VPF0731	POLYETHYLENE BAG	1	
PC4	XZB25X34C03X	POLYETHYLENE BAG	1	
PP3201	K1KA22A00044	CONNECTOR(MALE) 22P	1	
PP4301	VJP4369E014B	CONNECTOR(MALE) 14P	1	K1KA14A00134
PP6001,02	K1KA18B00034	CONNECTOR(MALE) 18P	2	
PP6003	K1KA10B00155	CONNECTOR(MALE) 10P	1	
PR1161	VSF0015A025	IC PROTECTOR	1	D4FAR2500001 ⚠
PR1171	VSF0015A10	IC PROTECTOR	1	B1ZAZ0000014 ⚠
PS3201	K1KB22A00025	CONNECTOR(FEMALE) 22P	1	
PS4201	VJS4222C014B	CONNECTOR(FEMALE) 14P	1	K1KB14A00037
PS6001,02	K1KB18B00017	CONNECTOR(FEMALE) 18P	2	
PS6003	K1KB10B00045	CONNECTOR(FEMALE) 10P	1	
PS6201	VJS4047C010	CONNECTOR(FEMALE) 10P	1	K1MN10A00030
Q1021	2SC4662LF654	TRANSISTOR	1	B1BADP000005

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q1051	B3PBA0000076	PHOTO COUPLER	1	⚠
Q1052	2SD1996-STA	TRANSISTOR	1	2SD19960SA
Q1115	B1DHCC000029	TRANSISTOR	1	⚠
Q3101	2SB1218ARL	TRANSISTOR	1	
Q3111	2SB1218ARL	TRANSISTOR	1	
Q3116	2SB1218ARL	TRANSISTOR	1	
Q3501	2SB0709AHL	TRANSISTOR	1	
Q3502	2SD601A-RSTX	TRANSISTOR	1	2SD0601AHL
Q3761	2SA15320XL	TRANSISTOR	1	
Q3766	2SA15320XL	TRANSISTOR	1	
Q3771	2SA15320XL	TRANSISTOR	1	
Q4302	2SD601A-RSTX	TRANSISTOR	1	2SD0601AHL
Q4410	2SD132800L	TRANSISTOR	1	
Q4413,14	2SD601A-RSTX	TRANSISTOR	2	2SD0601AHL
Q4419	2SD132800L	TRANSISTOR	1	
Q4420	2SD601A-RSTX	TRANSISTOR	1	2SD0601AHL
Q5211	2SB1115-T	TRANSISTOR	1	B1BDBF000004
Q5215	2SB1115-T	TRANSISTOR	1	B1BDBF000004
Q6091	2SD1992A-R	TRANSISTOR	1	
Q6095	2SD19960HA	TRANSISTOR	1	
QR1115	UNR221300L	TRANSISTOR	1	
QR3261	UN5212-TX	TRANSISTOR	1	UNR521200L
QR3501	UN2212	TRANSISTOR	1	UNR2212
QR3521	UN2212	TRANSISTOR	1	UNR2212
QR3523	UN2212	TRANSISTOR	1	UNR2212
QR4301,02	UNR221100L	TRANSISTOR	2	
QR4304	UN2111	TRANSISTOR	1	UNR211100L
QR5251	B1GDGFEE0001	TRANSISTOR	1	
QR6055,56	B1GDCFEM0002	TRANSISTOR	2	
QR6301	UN5212-TX	TRANSISTOR	1	UNR521200L
R1031,32	ERDS2FJ124T	1/4W 120K	2	
R1041,42	ERDS2FJ474	1/4W 470K	2	
R1043	ERG2SJ680P	2W 68	1	
R1051	ERDS2FJ750	1/4W 75	1	
R1052	ERDS2FJ2R2	1/4W 2.2	1	
R1053	ERDS2FJ331	1/4W 330	1	
R1054	EROS2TKG6800	1/4W 68	1	
R1101	ERJ3GEYJ750	1/16W 75	1	
R1102,03	ERJ3GEYF122V	1/16W 1.2K	2	
R1104	MCR03PZHJ561	1/16W 560	1	
R1105	ERJ6GEYJ271V	1/10W 270	1	D0GD271JA003
R1106	ERJ3GEYJ392V	1/16W 3.9K	1	
R1107	ERJ3GEYJ472V	1/16W 4.7K	1	
R1115	ERJ3GEYJ104V	1/16W 100K	1	D0GB104JA002
R1116	ERJ3GEYJ102V	1/16W 1K	1	
R1125	ERJ3GEYJ201V	1/16W 200	1	
R1126,27	ERJ3GEYF122V	1/16W 1.2K	2	
R1161	ERJ3GEYJ104V	1/16W 100K	1	D0GB104JA002
R1181	ERJ3GEYJ101V	1/16W 100	1	
R2011	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R2012	ERJ3GEYJ563V	1/16W 56K	1	
R2013	ERJ3GEY0R00A	1/16W 0	1	

[illegible]	[illegible]	[illegible]	[illegible]	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R2014	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R2015	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R2016	ERJ3GEY0R00A	1/16W 0	1	
R2017	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R2018	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R2019	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R2020	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R2021	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R2022	ERJ3GEYJ123V	1/16W 12K	1	
R2023	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R2024	ERJ3GEYJ123V	1/16W 12K	1	
R2026	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R2028,29	ERJ3GEYJ472V	1/16W 4.7K	2	
R2030	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R2031-33	ERJ3GEYJ682V	1/16W 6.8K	3	D0GB682JA002
R2034	ERJ3GEYJ183V	1/16W 18K	1	D0GB183JA002
R2035	ERJ3GEYJ822V	1/16W 8.2K	1	D0GB822JA002
R2036	ERJ3GEYJ682V	1/16W 6.8K	1	D0GB682JA002
R2037	ERJ3GEYJ333V	1/16W 33K	1	D0GB333JA002
R2038	ERJ3GEYJ102V	1/16W 1K	1	
R2040	ERJ3GEY0R00A	1/16W 0	1	
R2041	ERJ3GEYJ470V	1/16W 47	1	
R2047,48	ERJ3GEYJ104V	1/16W 100K	2	D0GB104JA002
R2051	ERJ3GEYJ104V	1/16W 100K	1	D0GB104JA002
R2061	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R2502,03	ERJ3GEYJ153V	1/16W 15K	2	
R2504,05	ERJ3GEYJ823V	1/16W 82K	2	D0GB823JA002
R2507	ERJ6GEYJ6R8V	1/10W 6.8	1	
R3001	ERJ3GEYJ220V	1/16W 22	1	
R3002	ERJ3GEYJ472V	1/16W 4.7K	1	
R3003	ERJ3GEYJ101V	1/16W 100	1	
R3004	ERJ3GEYJ221V	1/16W 220	1	
R3005	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R3007	ERJ3GEY0R00A	1/16W 0	1	
R3071	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R3080	ERJ3RBD752V	1/16W 7.5K	1	
R3082	ERJ3RBD162V	1/16W 1.6K	1	
R3083	ERJ3RBD112V	1/16W 1.1K	1	
R3084	ERJ3RBD752V	1/16W 7.5K	1	
R3085	ERJ3RBD183V	1/16W 18K	1	
R3086	ERJ3RBD432V	1/16W 4.3K	1	
R3087-89	ERJ3RBD752V	1/16W 7.5K	3	
R3090	ERJ3RBD272V	1/16W 2.7K	1	
R3101	ERJ3RED750V	1/16W 75	1	
R3102	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3103	ERJ3GEYJ102V	1/16W 1K	1	
R3106	ERJ3RED750V	1/16W 75	1	
R3111	ERJ3RED750V	1/16W 75	1	
R3112	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3113	ERJ3GEYJ102V	1/16W 1K	1	
R3115	ERJ3RED750V	1/16W 75	1	
R3117	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3118	ERJ3GEYJ102V	1/16W 1K	1	
R3261	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3503	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3504	ERJ3GEYJ222V	1/16W 2.2K	1	D0GB222JA002
R3505,06	ERJ3GEYJ151V	1/16W 150	2	
R3507	ERJ3GEYJ222V	1/16W 2.2K	1	D0GB222JA002
R3521	ERJ3GEYJ222V	1/16W 2.2K	1	D0GB222JA002
R3522	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R3528	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R3531-36	ERJ3GEYF750V	1/16W 75	6	
R3701,02	ERJ3GEYJ220V	1/16W 22	2	
R3751	ERJ3RBD222V	1/16W 2.2K	1	
R3752,53	ERJ3RBD102V	1/16W 1K	2	
R3761	ERJ3RBD221V	1/16W 220	1	
R3762	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3763	ERJ3GEYJ102V	1/16W 1K	1	
R3766	ERJ3RBD221V	1/16W 220	1	
R3767	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3768	ERJ3GEYJ102V	1/16W 1K	1	
R3771	ERJ3RBD221V	1/16W 220	1	
R3772	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3773	ERJ3GEYJ102V	1/16W 1K	1	
R4001,02	ERJ3GEYJ104V	1/16W 100K	2	D0GB104JA002
R4004	ERJ3GEYJ104V	1/16W 100K	1	D0GB104JA002
R4005,06	ERJ3GEY0R00A	1/16W 0	2	
R4009,10	ERJ3GEYJ103V	1/16W 10K	2	D0GB103JA002
R4201	ERJ3GEY0R00A	1/16W 0	1	
R4301,02	ERJ3GEYJ222V	1/16W 2.2K	2	D0GB222JA002
R4304	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R4313	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R4329,30	ERJ3GEYJ104V	1/16W 100K	2	D0GB104JA002
R4331,32	JAR0816P562D	1/16W 5.6K	2	D0HB562ZA002
R4355,56	JAR0816P123D	1/16W 12K	2	D0HB123ZA002
R4362	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R4401,02	ERJ3GEYJ683V	1/16W 68K	2	D0GB683JA002
R4404	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R4407	ERJ3GEYJ333V	1/16W 33K	1	D0GB333JA002
R4415	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R4422-24	ERJ3GEYJ473V	1/16W 47K	3	D0GB473JA002
R4428,29	ERJ3GEYJ821V	1/16W 820	2	
R4440	ERJ3GEYJ821V	1/16W 820	1	
R4447,48	ERJ3GEYJ821V	1/16W 820	2	
R4454	ERJ3GEYJ821V	1/16W 820	1	
R4459,60	ERJ3GEYJ221V	1/16W 220	2	
R4467	ERJ3GEYJ221V	1/16W 220	1	
R4468	ERJ3GEY0R00V	1/16W 0	1	
R4469	ERJ3GEYJ821V	1/16W 820	1	
R4470	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R4471	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R4472	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R4473	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R4474,75	ERJ3GEYJ821V	1/16W 820	2	
R5203	ERJ3GEYJ563V	1/16W 56K	1	
R5204	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R5211	ERJ3GEYJ2R2V	1/16W 2.2	1	D0GB2R2JA002
R5212	ERJ12YJ270H	1/2W 27	1	

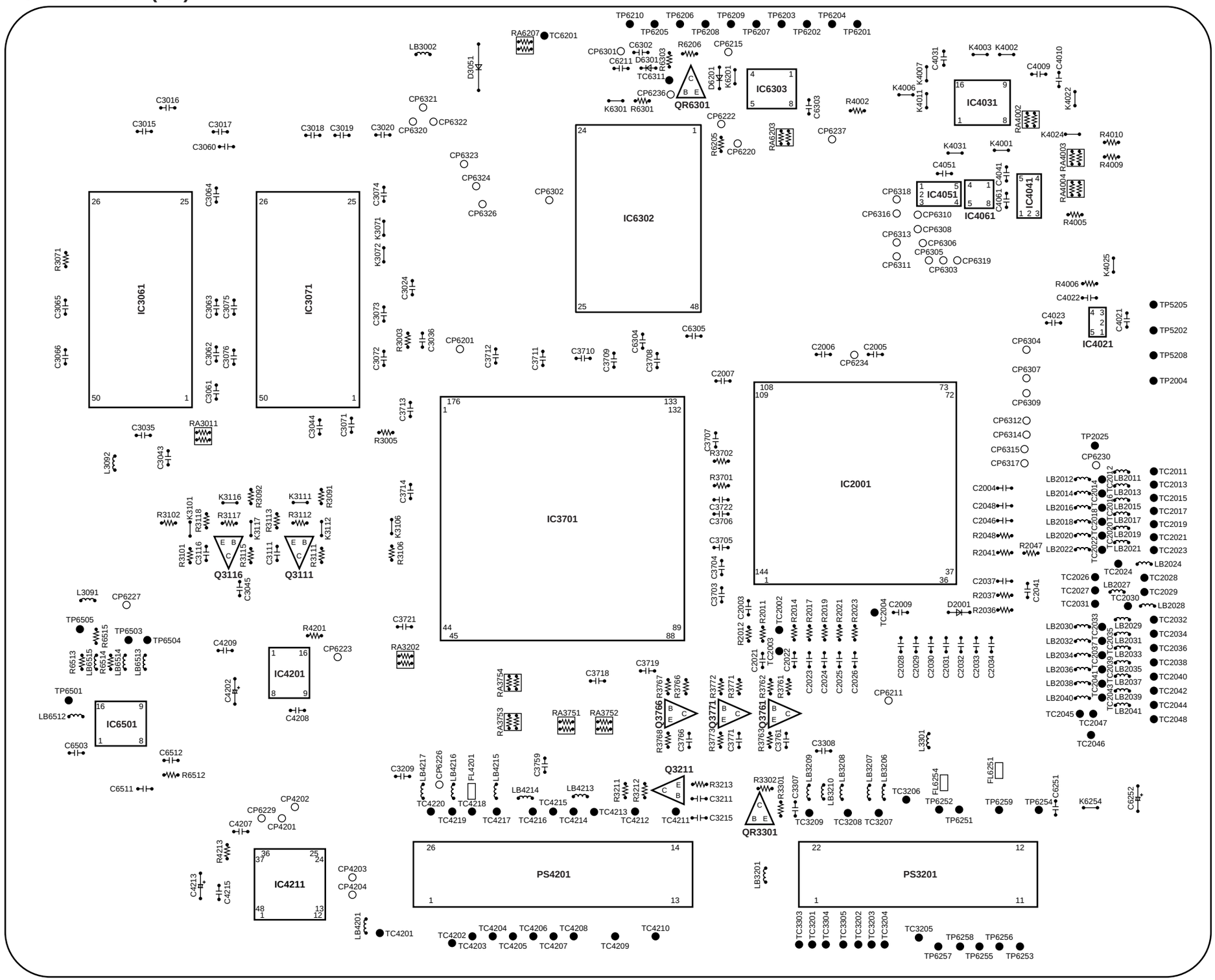
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R5213	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R5214	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R5215	ERJ3GEYJ2R2V	1/16W 2.2	1	D0GB2R2JA002
R5216	ERJ12YJ270H	1/2W 27	1	
R5217	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R5221,22	ERJ3GEYJ822V	1/16W 8.2K	2	D0GB822JA002
R5232	ERJ3RBD123V	1/16W 12K	1	
R5235	ERJ3GEYJ105V	1/16W 1M	1	
R5236	ERJ3GEY0R00V	1/16W 0	1	
R5252	ERJ3GEYJ102V	1/16W 1K	1	
R6021	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R6022	ERJ3GEY0R00V	1/16W 0	1	
R6023	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R6024	ERJ3GEYJ472V	1/16W 4.7K	1	
R6025	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R6026	ERJ3GEYJ153V	1/16W 15K	1	
R6031-34	ERJ3GEYJ103V	1/16W 10K	4	D0GB103JA002
R6056	ERJ3GEYJ560V	1/16W 56	1	
R6061,62	ERJ3GEYJ102V	1/16W 1K	2	
R6063	ERJ3GEYJ303V	1/16W 30K	1	
R6064	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R6066	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R6067	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R6091	ERJ6GEYJ221V	1/10W 220	1	
R6095	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R6151	ERJ3GEYJ122V	1/16W 1.2K	1	
R6152	ERJ3GEYJ152V	1/16W 1.5K	1	
R6153	ERJ3GEYJ222V	1/16W 2.2K	1	D0GB222JA002
R6154	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R6157	ERJ3GEYJ122V	1/16W 1.2K	1	
R6158	ERJ3GEYJ152V	1/16W 1.5K	1	
R6201	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R6205	ERJ3GEYJ102V	1/16W 1K	1	
R6206	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R6208	ERJ3GEYJ102V	1/16W 1K	1	
R6301	ERJ3GEYJ472V	1/16W 4.7K	1	
R6303	ERJ3GEYJ472V	1/16W 4.7K	1	
R6512	ERJ3RBD331V	1/16W 330	1	
R6513	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R6514	ERJ3GEYJ470V	1/16W 47	1	
R6515	ERJ3GEYJ100V	1/16W 10	1	
RA2061	EXBV4V330JV	RESISTOR-RESISTOR	1	
RA2501	EXBV8V473JV	RESISTOR-RESISTOR	1	
RA3008	EXBV4V103JV	RESISTOR-RESISTOR	1	
RA3009	EXBV4V221JV	RESISTOR-RESISTOR	1	
RA3011	EXBV4V473JV	RESISTOR-RESISTOR	1	
RA3012,13	EXBV8V331JV	RESISTOR-RESISTOR	2	
RA3701	EXBV8V220JV	RESISTOR-RESISTOR	1	
RA3702	EXBV4V101JV	RESISTOR-RESISTOR	1	
RA3751-54	EXBV8V331JV	RESISTOR-RESISTOR	4	
RA3755	EXBV4V331JV	RESISTOR-RESISTOR	1	
RA3756	EXBV4V101JV	RESISTOR-RESISTOR	1	
RA4001	EXBV4V473JV	RESISTOR-RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
RA4002	EXBV8V104JV	RESISTOR-RESISTOR	1	
RA4003	EXBV4VR000V	RESISTOR-RESISTOR	1	
RA4004	EXBV8VR000V	RESISTOR-RESISTOR	1	
RA4005,06	EXBV4VR000V	RESISTOR-RESISTOR	2	
RA5231	EXBV8V101JV	RESISTOR-RESISTOR	1	
RA6201-04	EXBV4V103JV	RESISTOR-RESISTOR	4	
RA6205	EXBV8V473JV	RESISTOR-RESISTOR	1	
RA6206	EXBV4V103JV	RESISTOR-RESISTOR	1	
RA6207	EXBV4V472JV	RESISTOR-RESISTOR	1	
S6101	EVQ11G07K	SWITCH,POWER	1	
S6151	EVQ11G07K	SWITCH,PAUSE	1	
S6152	EVQ11G07K	SWITCH,PLAY	1	
S6153	EVQ11G07K	SWITCH,STOP	1	
S6154	EVQ11G07K	SWITCH,QUICK REPLAY	1	
S6155	EVQ11G07K	SWITCH,OPEN/CLOSE	1	
S6156	EVQ11G07K	SWITCH,FWD-SKIP	1	
S6157	EVQ11G07K	SWITCH,RVS-SKIP	1	
S6158	EVQ11G07K	SWITCH,PROGRESSIVE OUT	1	
S6159	EVQ11G07K	SWITCH,ADVANCED SURROUND	1	
S6161	ESE24SH7	SWITCH,COUNT	1	
S6162	ESE24SH7	SWITCH,DIRECTION	1	
SW2501	RSH1A048-A	DOUBLE SWITCH	1	
T1021	ETS28AV125AC	TRANSFORMER	1	⚠
X6001	RSXY8M00M06T	CERAMIC OSCILLATOR	1	H2D800400009
X6501	H0J368500003	CRYSTAL OSCILLATOR	1	
ZA1001,02	EYF52BC	FUSE HOLDER	2	⚠
ZA1011	VMC1359	EARTH SPRING	1	⚠
ZA1111	K4CZ01000027	TERMINAL	1	
ZA4751-53	K4CZ01000027	TERMINAL	3	
ZA6001	K4CZ01000027	TERMINAL	1	

19. Schematic Diagram for printint with A4

H020400000HP

MODULE P.C.B. (2/2)



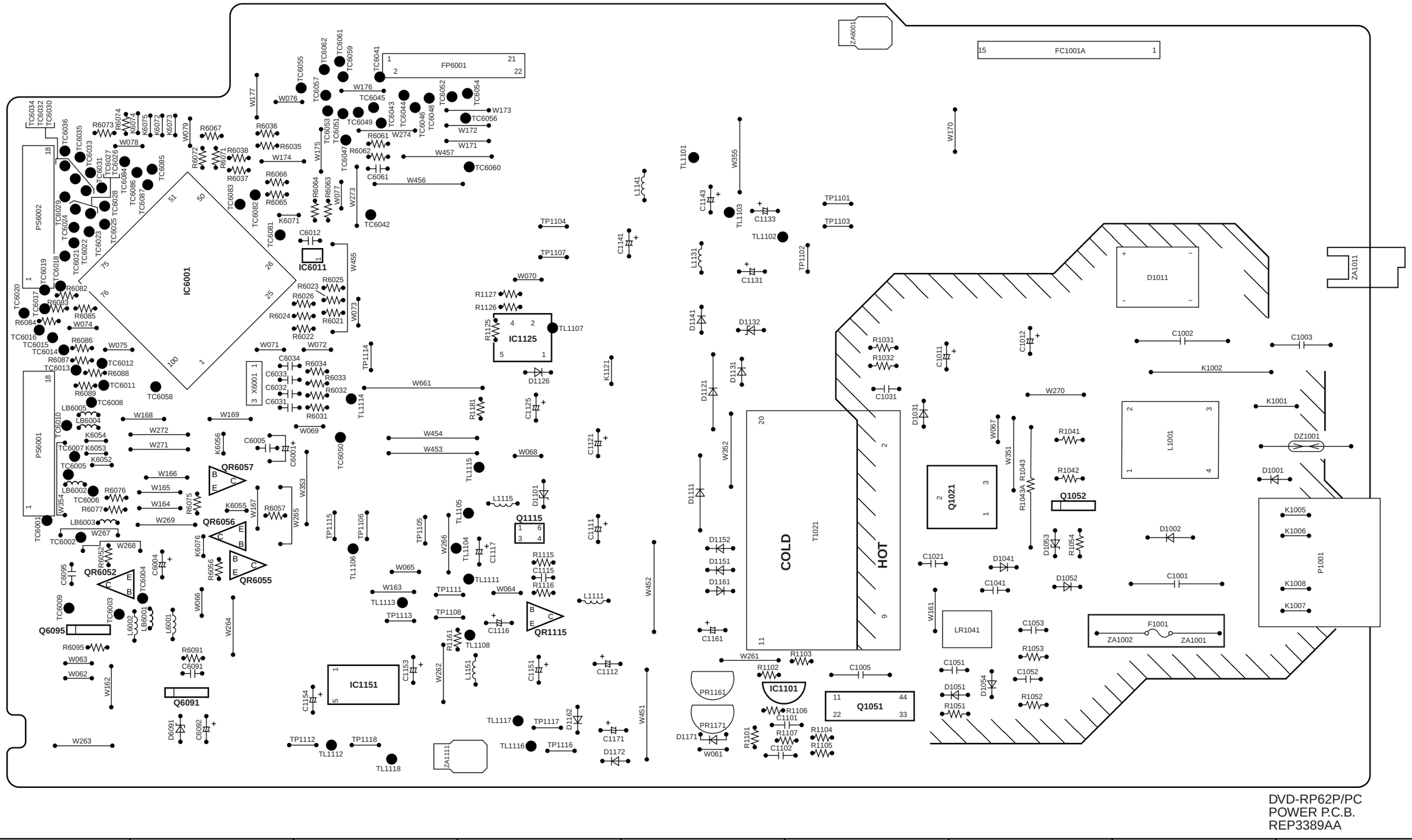
(FOIL SIDE)

DVD-RP62P/PC
MODULE P.C.B.
REP3385A

MODULE P.C.B.

Transistor	
Q3111	C-3 F
Q3116	C-2 F
Q3211	B-5 F
Q3761	B-5 F
Q3766	B-5 F
Q3771	B-5 F
Transistor-resistor	
QR3261	B-4 C
QR3301	B-5 F
QR6301	F-5 F
Itegrated Circuit	
IC2001	D-6 F
IC2061	D-3 C
IC3001	E-6 C
IC3061	E-2 F
IC3071	E-3 F
IC3201	B-6 C
IC3261	B-4 C
IC3301	B-3 C
IC3701	C-4 F
IC3731	D-4 C
IC3751	B-4 C
IC4001	E-2 C
IC4021	D-7 F
IC4031	F-6 F
IC4041	E-7 F
IC4051	E-6 F
IC4061	E-6 F
IC4201	B-2 F
IC4211	A-3 F
IC6201	E-4 C
IC6221	F-3 C
IC6222	F-3 C
IC6251	B-1 C
IC6301	F-4 C
IC6302	E-4 F
IC6303	F-5 F
IC6501	B-2 F
Test Point	
CP3001	F-7 C
CP3002	F-7 C
CP3003	F-7 C
CP3004	F-7 C
CP3005	F-7 C
CP3006	F-7 C
CP3007	F-7 C
CP3008	F-7 C
CP3009	F-7 C
CP3010	F-7 C
CP3011	E-5 C
CP3012	D-5 C
CP4001	E-3 C
CP4002	E-3 C
CP4003	E-3 C
CP4004	E-3 C
CP4005	E-3 C
CP4006	E-3 C
CP4007	E-3 C
CP4008	E-3 C
CP4009	F-3 C
CP4010	F-3 C
CP4011	F-2 C
CP4012	F-2 C
CP4013	F-2 C
CP4014	F-2 C
CP4015	F-2 C
CP4016	F-2 C
CP4017	F-2 C
CP4018	F-2 C
CP4019	E-1 C
CP4020	E-1 C
CP4021	D-2 C
CP4022	D-2 C
CP4023	E-3 C
CP4024	F-3 C
CP4025	F-3 C
CP4026	F-3 C
CP4027	F-3 C
CP4028	F-3 C
CP4201	B-2 F
CP4202	B-3 F
CP4203	A-3 F
CP4204	A-3 F
CP6201	D-3 F
CP6202	E-5 C
CP6203	E-5 C
CP6204	E-5 C
CP6205	E-5 C
CP6206	E-5 C
CP6207	E-5 C
CP6208	E-5 C
CP6209	E-5 C
CP6210	F-5 C
CP6211	B-6 F
CP6212	E-5 C
CP6213	E-5 C
CP6215	F-5 F
CP6216	F-4 C
CP6217	F-4 C
CP6218	F-4 C
CP6219	F-4 C
CP6220	E-5 F
CP6221	B-4 C
CP6222	F-5 F
CP6223	C-3 F
CP6224	E-4 C
CP6225	E-3 C
CP6226	B-3 F
CP6227	C-2 F
CP6228	E-4 C
CP6229	B-2 F
CP6230	D-7 F
CP6231	E-3 C
CP6232	E-4 C
CP6233	E-4 C
CP6234	D-6 F
CP6235	D-4 C
CP6236	F-5 F
CP6237	E-6 F
CP6301	F-4 F
CP6302	E-4 F
CP6303	E-6 F
CP6304	D-7 F
CP6305	E-6 F
CP6306	E-6 F
CP6307	D-7 F
CP6308	E-6 F
CP6309	D-7 F
CP6310	E-6 F
CP6311	E-6 F
CP6312	D-7 F
CP6313	E-6 F
CP6314	D-7 F
CP6315	D-7 F
CP6316	E-6 F
CP6317	D-7 F
CP6318	E-6 F
CP6319	E-6 F
CP6320	F-3 F
CP6321	F-3 F
CP6322	F-3 F
CP6323	E-3 F
CP6324	E-4 F
CP6325	E-5 C
CP6326	E-4 F
CP6327	E-5 C
CP6328	E-4 C
CP6329	D-4 C
CP6330	E-4 C
CP6331	D-4 C
CP6332	D-4 C
CP6333	D-4 C
CP6334	E-4 C
CP6335	D-4 C
TC2002	C-5 F
TC2003	C-5 F
TC2004	C-6 F
TC2011	D-7 F
TC2012	D-7 F
TC2013	D-7 F
TC2014	D-7 F
TC2015	C-7 F
TC2016	C-7 F
TC2017	C-7 F
TC2018	C-7 F
TC2019	C-7 F
TC2020	C-7 F
TC2021	C-7 F
TC2022	C-7 F
TC2023	C-7 F
TC2024	C-7 F
TC2026	C-7 F
TC2027	C-7 F
TC2028	C-7 F
TC2029	C-7 F
TC2030	C-7 F
TC2031	C-7 F
TC2032	C-7 F
TC2033	C-7 F
TC2034	C-7 F
TC2035	C-7 F
TC2036	C-7 F
TC2037	C-7 F
TC2038	C-7 F
TC2039	C-7 F
TC2040	B-7 F
TC2041	B-7 F
TC2042	B-7 F
TC2043	B-7 F
TC2044	B-7 F
TC2045	B-7 F
TC2046	B-7 F
TC2047	B-7 F
TC2048	B-7 F
TC3201	A-5 F
TC3202	A-6 F
TC3203	A-6 F
TC3204	A-6 F
TC3205	A-6 F
TC3206	B-6 F
TC3207	B-6 F
TC3208	B-6 F
TC3209	B-5 F
TC3303	A-5 F
TC3304	A-5 F
TC3305	A-6 F
TC4201	A-3 F
TC4202	A-3 F
TC4203	A-4 F
TC4204	A-4 F
TC4205	A-4 F
TC4206	A-4 F
TC4207	A-4 F
TC4208	A-4 F
TC4209	A-4 F
TC4210	A-5 F
TC4211	B-5 F
TC4212	B-4 F
TC4213	B-4 F
TC4214	B-4 F
TC4215	B-4 F
TC4216	B-4 F
TC4217	B-4 F
TC4218	B-4 F
TC4219	B-3 F
TC4220	B-3 F
TC6201	F-4 F
TC6230	A-6 C
TC6231	A-7 C
TC6232	A-7 C
TC6233	A-7 C
TC6234	A-7 C
TC6235	A-7 C
TC6236	A-7 C
TC6237	A-6 C
TC6238	A-6 C
TC6311	F-5 F
TL2004	D-1 C
TL5202	D-1 C
TL5205	E-1 C
TL5208	D-1 C
TL6201	F-3 C
TL6202	F-3 C
TL6203	F-3 C
TL6204	F-3 C
TL6205	F-4 C
TL6206	F-4 C
TL6207	F-3 C
TL6208	F-4 C
TL6209	F-4 C
TL6210	F-4 C
TP2004	D-7 F
TP2025	D-7 F
TP3271	A-3 C
TP3272	A-3 C
TP3273	A-3 C
TP3274	A-3 C
TP3275	A-3 C
TP3276	A-3 C
TP3277	A-3 C
TP3278	A-4 C
TP3279	A-4 C
TP3280	A-4 C
TP3281	A-4 C
TP3282	A-4 C
TP4002	E-2 C
TP4003	E-1 C
TP4004	E-1 C
TP4005	E-1 C
TP4006	E-1 C
TP4007	E-1 C
TP4008	E-1 C
TP4009	E-2 C
TP4271	A-4 C
TP4272	A-4 C
TP4273	A-4 C
TP4274	A-4 C
TP4275	A-4 C
TP4276	A-5 C
TP4277	A-5 C
TP4278	A-5 C
TP4279	A-5 C
TP4280	A-5 C
TP4281	A-5 C
TP4282	A-5 C
TP4283	A-5 C
TP4284	A-5 C
TP4285	A-5 C
TP4286	A-5 C
TP4287	A-5 C
TP4288	A-6 C
TP4289	A-6 C
TP5202	D-7 F
TP5205	E-7 F
TP5208	D-7 F
TP6201	F-6 F
TP6202	F-5 F
TP6203	F-5 F
TP6204	F-6 F
TP6205	F-5 F
TP6206	F-5 F
TP6207	F-5 F
TP6208	F-5 F
TP6209	F-5 F
TP6210	F-4 F
TP6251	B-6 F
TP6252	B-6 F
TP6253	A-7 F
TP6254	B-7 F
TP6255	A-6 F
TP6256	A-6 F
TP6257	A-6 F
TP6258	A-6 F
TP6259	B-6 F
TP6271	A-2 C
TP6272	A-2 C
TP6273	A-2 C
TP6274	A-2 C
TP6275	A-2 C
TP6276	A-2 C
TP6277	A-2 C
TP6278	A-3 C
TP6279	A-3 C
TP6501	B-1 F
TP6503	C-2 F
TP6504	C-2 F
TP6505	C-1 F
Connector	
FP2001	C-1 C
FP3202	A-2 C
FP3203	A-3 C
FP4202	A-5 C
PS3201	A-6 F
PS4201	A-4 F
PS6201	F-5 C

POWER P.C.B.


FP6001
FC1001A
IC6001
IC6011
IC1125
IC1151
IC1101
Q6095
Q6091
Q1115
Q1051
Q1021
Q1052
QR6057
QR6056
QR6055
QR6052
QR1115
COLD
HOT
T1021
D1011
P1001
L1001
F1001
ZA1001
ZA1002
DVD-RP62P/PC
POWER P.C.B.
REP3389AA

POWER P.C.B.

Transistor	
Q1021	C-7
Q1051	A-6
Q1052	C-7
Q1115	B-4
Q6091	A-2
Q6095	B-1

Transistor - resistor	
QR1115	B-4
QR6052	B-1
QR6052	B-2
QR6055	B-2
QR6057	C-2

Integrated Circuit	
IC1101	A-5
IC1125	D-4
IC1151	A-3
IC6001	D-2
IC6011	D-3

Test Point	
TC6001	B-1
TC6002	B-1
TC6003	B-1
TC6004	B-2
TC6005	C-1
TC6006	C-1
TC6007	C-1
TC6008	C-1
TC6009	B-1
TC6010	C-1
TC6011	C-1
TC6012	C-1
TC6013	C-1
TC6014	C-1
TC6015	D-1
TC6016	D-1
TC6017	D-1
TC6018	D-1
TC6019	D-1
TC6020	D-1
TC6021	D-1
TC6022	D-1
TC6023	D-1
TC6024	D-1
TC6025	D-1
TC6026	D-1
TC6027	D-1
TC6028	D-1
TC6029	D-1
TC6030	D-1
TC6031	E-1
TC6032	E-1
TC6033	E-1
TC6034	E-1
TC6035	E-1
TC6036	E-1
TC6041	E-3
TC6042	D-3
TC6043	E-3
TC6044	E-3
TC6045	E-3
TC6046	E-3
TC6047	E-3
TC6048	E-3
TC6049	E-3
TC6050	C-3
TC6051	E-3
TC6052	E-3
TC6053	E-3
TC6054	E-4
TC6055	E-3
TC6056	E-4
TC6057	E-3
TC6058	C-2
TC6059	E-3
TC6060	E-4
TC6061	E-3
TC6062	E-3
TC6081	D-2
TC6082	D-2
TC6083	D-2
TC6084	E-1
TC6085	E-2
TC6086	E-2
TC6087	D-2
TL1101	E-5
TL1102	D-5
TL1103	D-5
TL1104	B-3
TL1105	C-4
TL1106	B-3
TL1107	D-4
TL1108	B-4
TL1111	B-4
TL1112	A-3
TL1113	B-3
TL1114	C-3
TL1115	C-4
TL1116	A-4
TL1117	A-4
TL1118	A-3
TP1101	D-6
TP1102	D-6
TP1103	D-6
TP1104	D-4
TP1105	B-3
TP1106	B-3
TP1107	D-4
TP1108	B-3
TP1111	B-3
TP1112	A-3
TP1113	B-3
TP1114	C-3
TP1115	B-3
TP1116	A-4
TP1117	A-4
TP1118	A-3

Connector	
DZ1001	C-9
FC1001	E-7
FP6001	E-3
P1001	B-9
PS6001	C-1
PS6002	D-1

TERMINAL P.C.B.

Transistor

Q3501	B-3
Q3502	B-3
Q4302	A-6
Q4315	A-4
Q4410	D-1
Q4411	D-1
Q4412	D-2
Q4413	D-1
Q4414	C-2
Q4415	C-2
Q4416	C-2
Q4417	C-2
Q4418	B-2
Q4419	D-1
Q4420	C-2
Q4751	A-1
Q4901	B-7
Q4911	B-6
Q4921	C-6
Q4931	C-6

Transistor - resistor

QR3501	E-2
QR3521	D-2
QR3523	F-2
QR3571	F-2
QR3572	F-2
QR3573	F-1
QR4301	B-5
QR4302	B-6
QR4304	B-6
QR4316	A-4
QR4317	A-4
QR4901	C-7
QR4902	C-6
QR4903	C-6
QR4904	C-7

Integrated Circuit

IC3501	D-2
IC3581	C-2
IC4301	C-5
IC4302	B-4
IC4303	B-5
IC4304	A-5
IC4305	A-6
IC4403	A-3

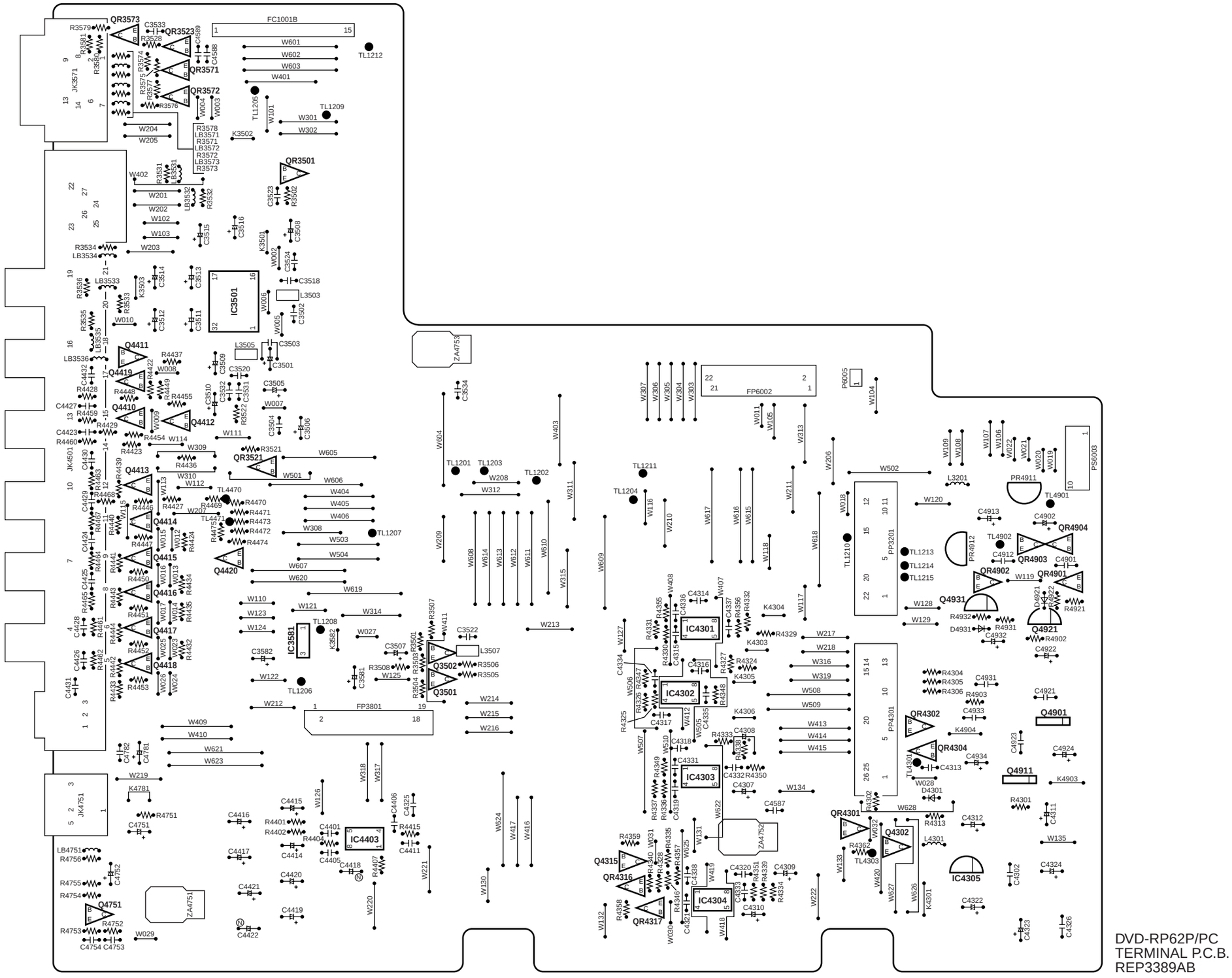
Test Point

TL1201	D-3
TL1202	C-4
TL1203	D-3
TL1204	C-4
TL1205	F-2
TL1206	B-2
TL1207	C-3
TL1208	C-2
TL1209	E-3
TL1210	C-5
TL1211	D-4
TL1212	F-3
TL1213	C-6
TL1214	C-6
TL1215	C-6
TL4301	B-6
TL4303	A-6
TL4470	C-2
TL4471	C-2
TL4901	C-7
TL4902	C-6

Connector

FC1001	F-2
FP3801	B-3
FP6002	D-5
JK3571	F-1
JK4501	D-1
JK4751	B-1
P6005	D-5
PP3201	C-6
PP4301	B-6
PS6003	D-7

TERMINAL P.C.B.



DVD-RP62P/PC
TERMINAL P.C.B.
REP3389AB

PO SECTION:Page A OP SECTION:Page B VO SECTION:Page C
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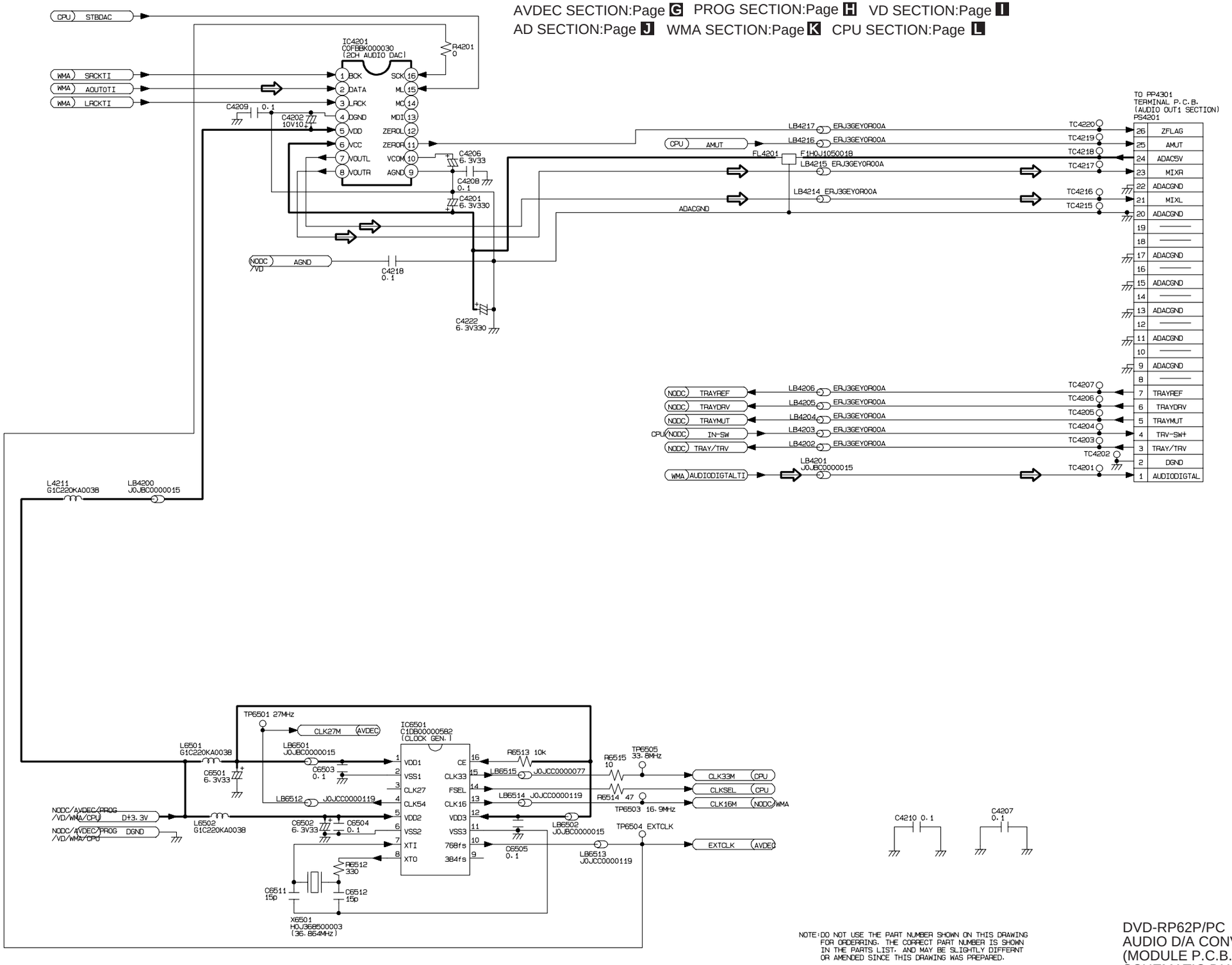
AUDIO SIGNAL PATH

J



NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
AUDIO D/A CONVERTER SECTION
(MODULE P.C.B.(5/7))
SCHEMATIC DIAGRAM

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⇦ AUDIO SIGNAL PATH

D

TL4301
R4304 3.3K
QR4304 UNR211100L (MUTE)
MUTE AO2
C4313 0.1
QR4302 UNR221100L (MUTE)
−5V AO2
D4301 MAZ80470M
R4313 22K
R4302 2.2K
Q4302 2SD0601AHL (POWER MUTE)
R4362 10K
POWER_MUTE VO
R4301 2.2K
QR4301 UNR221100L (MUTE)
TL4303

TO PS4201
MODULE P.C.B.
(AUDIO DAC SECTION)
PP4301

ZFLAG	26
AMUT	25
ADAC5V	24
MIXR	23
ADACGND	22
MIXL	21
ADACGND	20
———	19
———	18
ADACGND	17
———	16
ADACGND	15
———	14
ADACGND	13
———	12
ADACGND	11
———	10
ADACGND	9
———	8
TRAYREF	7
TRAYDRV	6
TRAYMUT	5
TRV-SW+	4
TRAY/TRV	3
DGND	2
AUDIODIGTAL	1

L4301 100u
A+5V VO
C4312 6.3V1000
C4304 16V47
C4303 16V47

TRAYREF VO
TRAYDRV VO
TRAYMUT VO
TRV-SW+ VO
TRAY/TRV VO
ADIGITAL AO2

MIXL
R4330 100k
R4331 5.6K
R4355 12K
C4336 100p
IC4301 C0ABBB000118
MIXLOUT AO2

MIXR
R4329 100k
R4332 5.6K
R4356 12K
C4337 100p
IC4301 C0ABBB000118
MIXROUT AO2

VO NSW+10V
VO AGND
VO NSW−10V

C4323 25V220
C4324 25V220

IC4301 C0ABBB000118
C4314 0.1
C4315 0.1
VCC
VEE
+10V AO2
−10V AO2

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

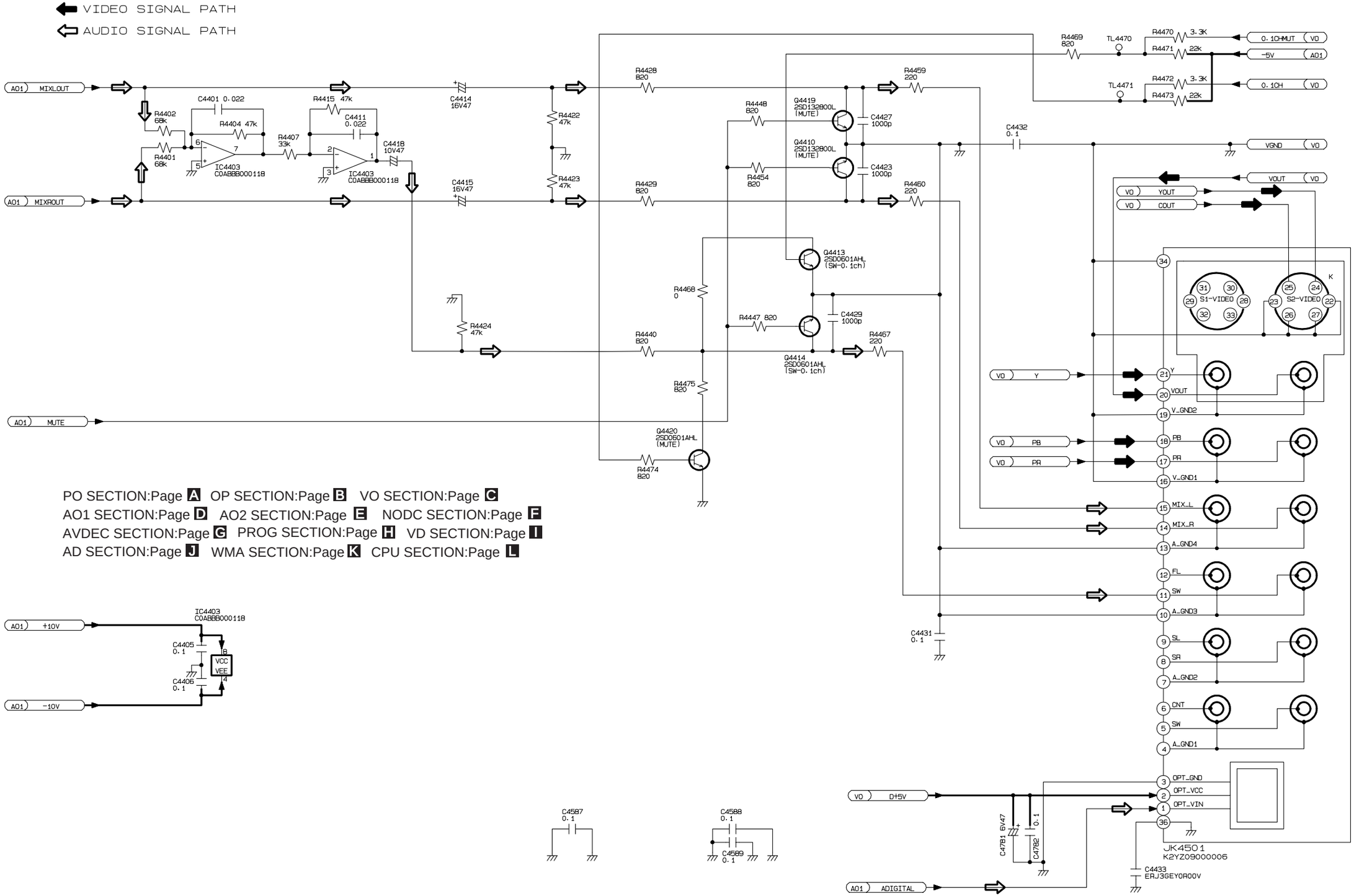
DVD-RP62P/PC
AUDIO OUT 1 SECTION
(TERMINAL P.C.B.(2/3))
SCHEMATIC DIAGRAM

G F E D C B A

1 2 3 4 5 6 7 8 9 10 11

VIDEO SIGNAL PATH

AUDIO SIGNAL PATH



PO SECTION:Page A OP SECTION:Page B VO SECTION:Page C
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DVD-RP62P/PC
AUDIO OUT 2 SECTION
(TERMINAL P.C.B.(3/3))
SCHEMATIC DIAGRAM

MAIN SIGNAL

IC3001
(AV DECODER)

IC3001-92
6.4Vp-p(10usec./div.)

IC4031
(DIGITAL AUDIO SELECT SW.)

SRCK 90 — 14 4A — 4Y 12 — SRCK
LRCK 89 — 11 3A — 3Y 9 — LRCK
ADOUT0 92 — 5 2A — 2Y 7 — AUTO0
IEC OUT 85 — 2 1A — 1Y 4

IC4201
(AUDIO D/A CONVERTER)

SRCK 1
LRCK 3
AOUT0 2
AUDIO SERIAL PORT
FROM IC6201-68PIN — STBDAC 15
FROM IC6201-70PIN — SBT1 14
FROM IC6201-72PIN — SBO1 13
SERIAL CONTROL PORT
OVERSAMPLING DIGITAL FILTER WITH FUNCTION CONTROLLER
ENHANCED MULTI-LEVEL DELTA-SIGMA MODULATOR
DAC
OUTPUT AMP AND LOW-PASS FILTER
7 MIXL
DAC
OUTPUT AMP AND LOW-PASS FILTER
8 MIXR
SYSTEM CLOCK
FROM IC6501-10PIN — SCK 16
SYSTEM CLOCK MANAGER
ZERO DETECT

IC4301
2 AMP 1
IC4301
6 AMP 7
IC4403
7 AMP 6
IC4403
2 AMP 1

A MUTE
FROM IC6201-64PIN

0.7Vp-p(0.5msec./div.)

JK4501
MIX L
MIX R
SUB-WOOFER

JK4501
DIGITAL AUDIO OUT OPTICAL

DVD-RP62P/PC
AUDIO BLOCK DIAGRAM

VIDEO SIGNAL PATH

AUDIO SIGNAL PATH

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IC3061
C3ABMG000103
(16M-SDRAM)

IC3001
MN677533MP
(AVDEC)

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
AV DECORDER SECTION
(MODULE P.C.B.(2/7))
SCHEMATIC DIAGRAM

PO SECTION:Page A OP SECTION:Page B VO SECTION:Page C
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AVDEC SECTION:Page G PROG SECTION:Page H VD SECTION:Page I
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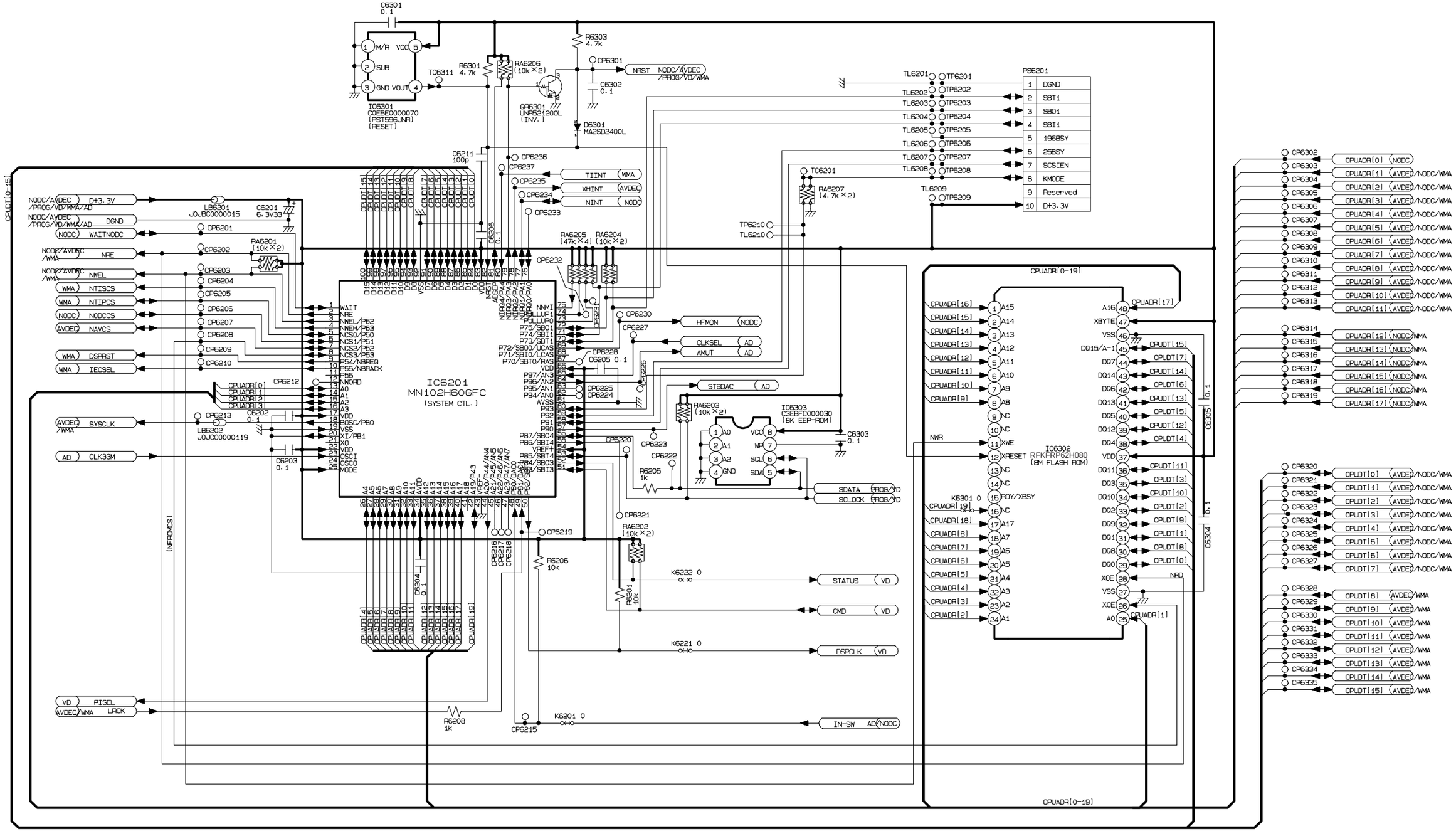
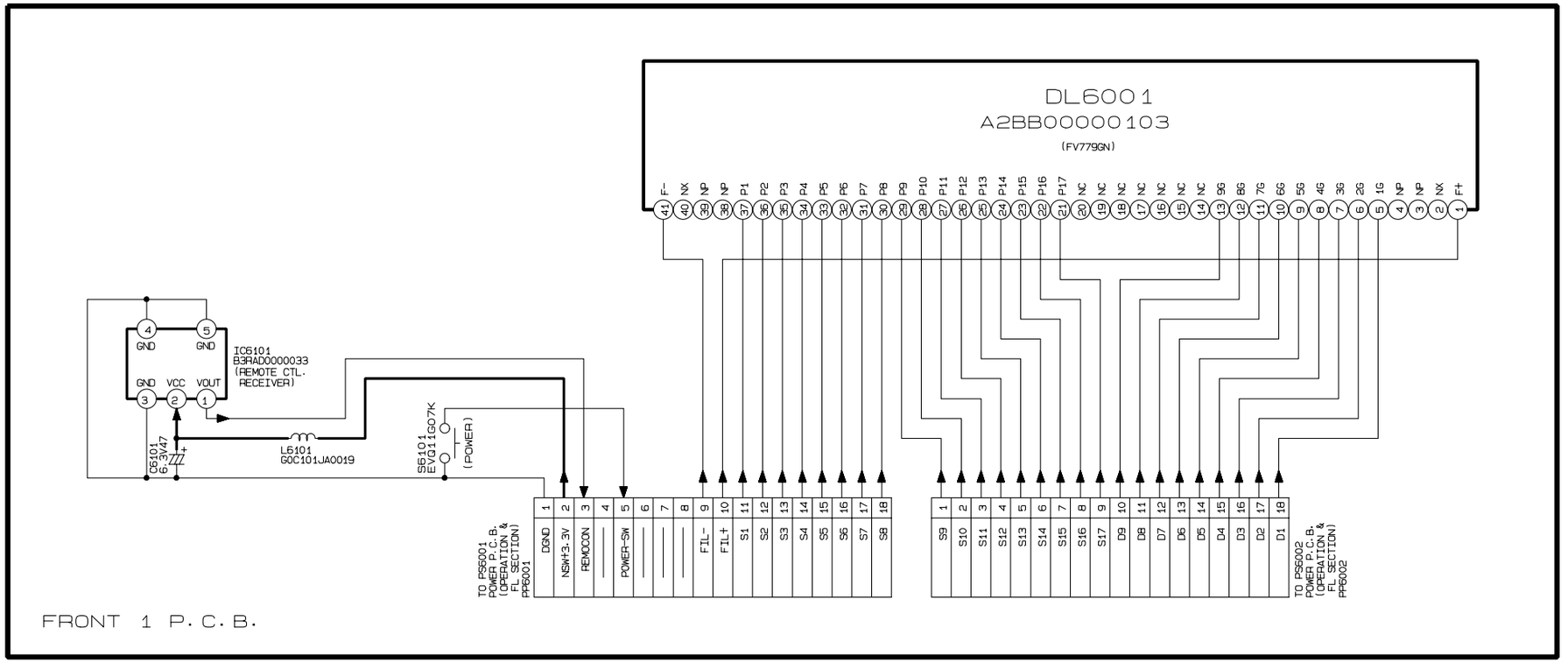
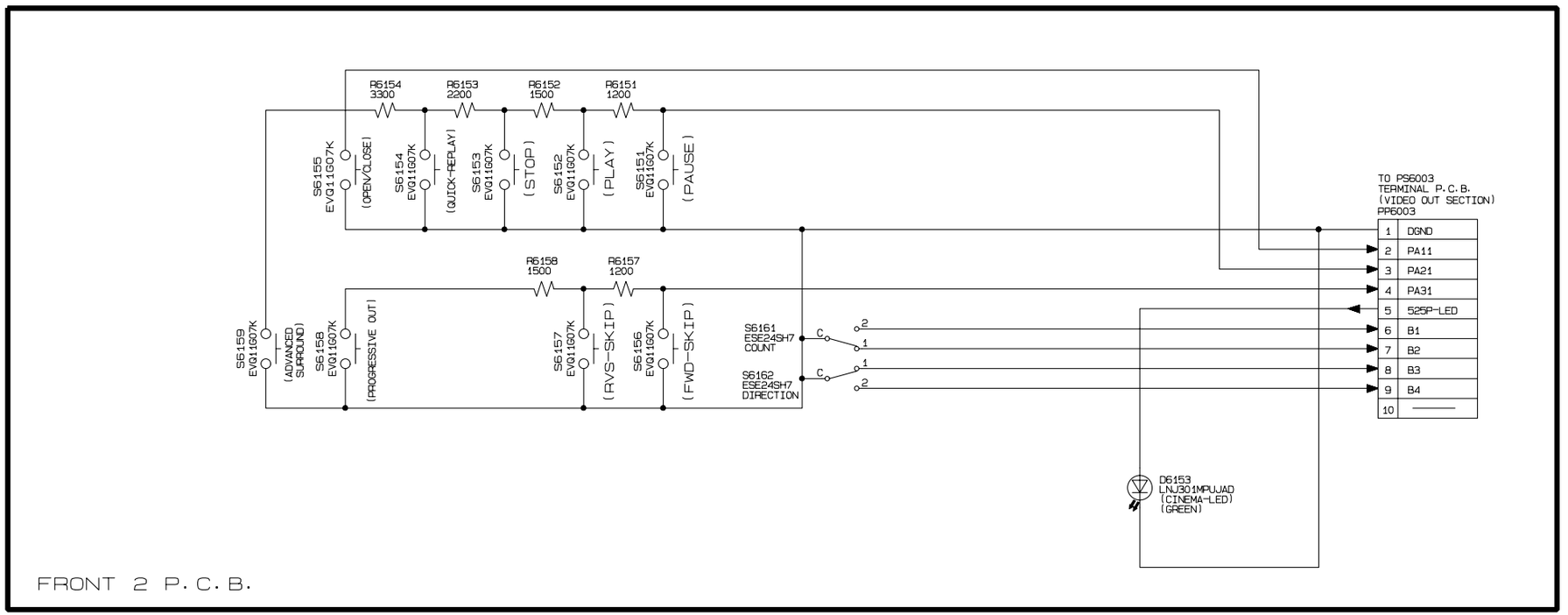


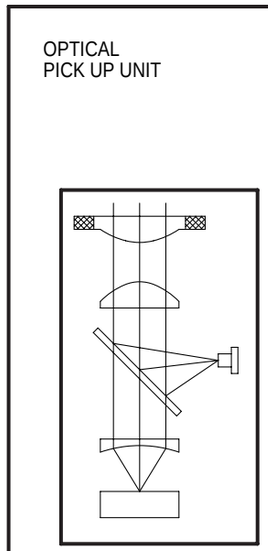
DVD-RP62P/PC
CPU SECTION
(MODULE P.C.B.(7/7))
SCHEMATIC DIAGRAM





NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
FRONT 1/FRONT 2
SCHEMATIC DIAGRAM



INTERMEDIATE P.C.B.

FP5201

1	GND
2	P IN
3	T2
4	FE2
5	V REF2.2
6	T1
7	LD(+)
8	GND
9	FE1
10	VCC 5V
11	TB
12	TC
13	TD
14	TA
15	V REF2.2
16	P IN
17	GAIN H/L
18	F2
19	F1
20	RF N
21	RF P
22	GND
23	GND
24	LD(+)
25	GND
26	3.3V HFM
27	T(-)
28	F(-)
29	F(+)
30	T(+)

FP5202

A GND	50
HFMON	49
GAIN H/L	48
A GND	47
F BAL	46
T BAL	45
A GND	44
FEP ENB	43
FEP CLK	42
FEP DATA	41
OFTR	40
BD0	39
A GND	38
TE	37
FE	36
FS	35
VHALF	34
A +3.3V	33
A +3.3V	32
A GND	31
ARF	30
NARF	29
TST SG	28
RF ENV	27
A +5V	26
V REF2	25
LD CUR	24
IN SW	23
TRAY/TRV	22
MUTE3	21
TRVS IN	20
TRAY REF	19
TRAY IN	18
SPD IN	17
TR IN	16
FO IN	15
DMV/FG	14
MUTE4	13
MUTE12	12
M GND	11
M GND	10
M GND	9
M GND	8
M +9V	7
M +9V	6
M +9V	5
D +5V	4
D +5V	3
D GND	2
D GND	1

FP2001

1	A GND
2	HFMON
3	GAIN H/L
4	A GND
5	F BAL
6	T BAL
7	A GND
8	FEP ENB
9	FEP CLK
10	FEP DATA
11	OFTR
12	BD0
13	A GND
14	TE
15	FE
16	FS
17	VHALF
18	A +3.3V
19	A +3.3V
20	A GND
21	ARF
22	NARF
23	TST SG
24	RF ENV
25	A +5V
26	V REF2
27	LD CUR
28	IN SW
29	TRAY/TRV
30	MUTE3
31	TRVS IN
32	TRAY REF
33	TRAY IN
34	SPD IN
35	TR IN
36	FO IN
37	DMV/FG
38	MUTE4
39	MUTE12
40	M GND
41	M GND
42	M GND
43	M GND
44	M +9V
45	M +9V
46	M +9V
47	D +5V
48	D +5V
49	D GND
50	D GND

MODULE P.C.B.

PS4201

1	AUDIO DIGITAL
2	D GND
3	TRAY/TRV
4	TRV SW(+)
5	TRAY MUT
6	TRAY DRV
7	TRAY REF
8	
9	A DAC GND
10	
11	A DAC GND
12	
13	A DAC GND
14	
15	A DAC GND
16	
17	A DAC GND
18	
19	
20	A DAC GND
21	MIX L
22	A DAC GND
23	MIX R
24	A DAC 5V
25	A MUT
26	ZFLAG

PS3201

1	CB/PB/B
2	V GND
3	DSP CLK
4	STATUS
5	CMD
6	D GND
7	M +9V
8	M GND
9	D +5V
10	D GND
11	D +2.5V
12	D GND
13	D +2.5V
14	D GND
15	A +5V
16	A GND
17	Y
18	V GND
19	C
20	V GND
21	PR/CR/R
22	PY/YYG

MECHANISM UNIT

TRAY
OPEN
SWITCH

P6005

1	TRAY SW(-)
2	D GND

JK4501

TERMINAL P.C.B.

PP4301

1	AUDIO DIGITAL
2	D GND
3	TRAY/TRV
4	TRV SW(+)
5	TRAY MUT
6	TRAY DRV
7	TRAY REF
8	
9	A DAC GND
10	
11	A DAC GND
12	
13	A DAC GND
14	
15	A DAC GND
16	
17	A DAC GND
18	
19	
20	A DAC GND
21	MIX L
22	A DAC GND
23	MIX R
24	A DAC 5V
25	A MUT
26	ZFLAG

PP3201

1	CB/PB/B
2	V GND
3	DSP CLK
4	STATUS
5	CMD
6	D GND
7	M +9V
8	M GND
9	D +5V
10	D GND
11	D +2.5V
12	D GND
13	D +2.5V
14	D GND
15	A +5V
16	A GND
17	Y
18	V GND
19	C
20	V GND
21	PR/CR/R
22	PY/YYG

FRONT1 P.C.B.

⏻ / I

FIP

PR6001

1	D GND
2	NSW +3.3V
3	REMOCON
4	
5	POWER SW
6	
7	
8	
9	FIL -
10	FIL +
11	S1
12	S2
13	S3
14	S4
15	S5
16	S6
17	S7
18	S8

PR6002

1	S9
2	S10
3	S11
4	S12
5	S13
6	S14
7	S15
8	S16
9	S17
10	D9
11	D8
12	D7
13	D6
14	D5
15	D4
16	D3
17	D2
18	D1

FRONT2 P.C.B.

PR6003

1	D GND
2	PA11
3	PA21
4	PA31
5	525P LED
6	B1
7	B2
8	B3
9	B4
10	

FC1001B

1	NSW +10V
2	NSW -10V
3	D +2.5V
4	A +5V
5	
6	A DAC GND
7	WIDE 1
8	M +9V
9	D +5V
10	A GND
11	M GND
12	D GND
13	CMD
14	STATUS
15	DSP CLK

FP6002

1	TRAY REF
2	TRAY DRV
3	TRAY SW -
4	POWER MUTE
5	TRY SW +
6	PA31
7	
8	PA21
9	B1
10	PA11
11	B2
12	
13	B4
14	525P LED
15	B3
16	525PIYCL
17	TRAY/TRV
18	0.1CH MUT
19	TRAY MUT
20	0.1CH
21	
22	

POWER P.C.B.

PS6001

1	
2	D GND
3	NSW +3.3V
4	REMOCON
5	
6	POWER SW
7	
8	
9	FIL -
10	FIL +
11	S1
12	S2
13	S3
14	S4
15	S5
16	S6
17	S7
18	S8

PS6002

1	
2	S9
3	S10
4	S11
5	S12
6	S13
7	S14
8	S15
9	S16
10	S17
11	D9
12	D8
13	D7
14	D6
15	D5
16	D4
17	D3
18	D2
	D1

PS6003

1	D GND
2	PA11
3	PA21
4	PA31
5	525P LED
6	B1
7	B2
8	B3
9	B4
10	

P1001

FC1001A

1	
2	NSW +10V
3	NSW -10V
4	D +2.5V
5	A +5V
6	
7	A DAC GND
8	WIDE 1
9	M +9V
10	D +5V
11	A GND
12	M GND
13	D GND
14	CMD
15	STATUS
	DSP CLK

FP6001

1	TRAY REF
2	TRAY DRV
3	TRAY SW -
4	POWER MUTE
5	TRY SW +
6	PA31
7	
8	PA21
9	B1
10	PA11
11	B2
12	
13	B4
14	525P LED
15	B3
16	525PIYCL
17	TRAY/TRV
18	0.1CH MUT
19	TRAY MUT
20	0.1CH
21	
22	

DVD-RP62P/PC
INTERCONNECTION
SCHEMATIC DIAGRAM

G F E D C B A

1 2 3 4 5 6 7 8 9 10 11

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AVDEC SECTION:Page G PROG SECTION:Page H VD SECTION:Page I
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MAIN SIGNAL PATH

F

TO FP5202
INTERMEDIATE P.C.B.
FP2001

DGND 50 DGND 49 D+5V 48 D+5V 47 M+9V 46 M+9V 45 M+9V 44 MGND 43 MGND 42 MGND 41 MGND 40 MUTE12 39 MUTE4 38 DMV/FG 37 FOIN 36 TRIN 35 SPDIN 34 TRAYIN 33 TRAYREF 32 TRVSIN 31 MUTE3 30 TRAY/TRV 29 IN-SW 28 LDCUR 27 VREF2 26 A+5V 25 RFENV 24 TSTSG 23 NARF 22 ARF 21 AGND 20 A+3.3V 19 A+3.3V 18 VHALF 17 FS 16 FE 15 TE 14 AGND 13 BDO 12 OFTR 11 FEPDATA 10 FEPCLK 9 FEPENB 8 AGND 7 TBAL 6 FBAL 5 AGND 4 GAINH/L 3 HFMON 2 AGND 1

TC2048 TC2047 LB2043 J0JHC0000045 D+5V (VD) TC2046 LB2042 J0JHC0000045 M+9V (VD) TC2045 MGND (VD) TC2044 LB2041 J0JBC0000015 TC2043 LB2040 ERJ3GEY0R00V TRAYMUT (AD) TC2042 LB2039 J0JBC0000015 TC2041 LB2038 J0JBC0000015 TC2040 LB2037 J0JBC0000015 TC2039 LB2036 J0JBC0000015 TC2038 LB2035 ERJ3GEY0R00V TRAYDRV (AD) TC2037 LB2034 ERJ3GEY0R00V TRAYREF (AD) TC2036 LB2033 J0JBC0000015 TC2035 LB2032 J0JBC0000015 TC2034 LB2031 ERJ3GEY0R00V TRAY/TRV (AD) TC2033 LB2030 ERJ3GEY0R00V IN-SW (AD/CPU) TC2032 LB2029 J0JBC0000015 TC2031 TC2030 LB2028 J0JBC0000015 A+5V (AVDEC/VD) TC2029 LB2027 J0JBC0000015 TC2028 TC2027 LB2026 J0JBC0000015 TC2026 LB2025 J0JBC0000015 TC2025 TC2024 LB2024 J0JBC0000015 TC2023 LB2023 J0JBC0000015 TC2022 LB2022 J0JBC0000015 TC2021 LB2021 J0JBC0000015 TC2020 LB2020 J0JBC0000015 TC2019 LB2019 J0JBC0000015 TC2018 LB2018 J0JBC0000015 TC2017 LB2017 J0JBC0000015 TC2016 LB2016 J0JBC0000015 TC2015 LB2015 J0JBC0000015 TC2014 LB2014 J0JBC0000015 TC2013 LB2013 J0JBC0000015 TC2012 LB2012 J0JBC0000015 TC2011 LB2011 J0JBC0000015 HFMON (CPU)

L2001 G1C100K00020 (LB2016T100K)
C2002+ 4V100 AGND (VD/AD)

IC2061 C3ABKG000057 (4MDRAM)
RA2061 (33×2)
C2061+ 10V10 C2062 0.1 C2064 0.1 C2063 0.1 C2008 0.1 C2007 0.1
R2061 33

IC2001 MN677203NP1 (OPTICAL DISC CTL.)

R2013 0 R2016 0 R2018 22k R2012 56k R2015 22k R2020 22k R2022 12k R2024 12k TC2002 TC2003 C2003 0.1
C2021 8.2n C2022 39n C2023 680p C2024 680p C2025 47n C2026 47n R2023 3.3k R2021 3.3k R2019 3.3k R2017 3.3k R2014 3.3k R2011 3.3k TL5208 TP5208
C2010 0.1 C2009 0.1 TC2004
R2034 18k R2031 6.8k R2029 4.7k R2028 4.7k R2033 6.8k R2032 6.8k D2001 MA2J11100L
R2035 8.2k R2030 10k C2030 470p C2033 3.3n C2032 47n C2031 3.3n C2029 1.5n C2028 2.2n C2034 0.1 R2026 47k C2027 3.3n
C2011 0.1 C2036 3.3n R2037 33k C2046 33p C2004 0.1
R2047 100k R2048 100k
R2036 6.8k C2035 47n C2037 1n C2038 0.47 R2038 1k R2040 0 C2039 0.01 R2041 47 C2041 2.2 C2042 0.1 C2043 0.1 C2044 100p C2045 0.1 C2047 0.1

L2001 J0JHC0000045
C2001 6.3V330
TL2004 TP2004
D+3.3V (AVDEC/PROG /VD/WMA/AD/CPU)
DGND (AVDEC/PROG /VD/WMA/AD/CPU)

TL5202 TP5202 TL5205 TP5205
C2006 0.1
R2051 100k C2005 0.1 C2051 0.01 C2052 1n

AVRTM (AVDEC) STD0 (AVDEC/WMA) STD1 (AVDEC/WMA) STD2 (AVDEC/WMA) STD3 (AVDEC) STD4 (AVDEC) STD5 (AVDEC) STD6 (AVDEC) STD7 (AVDEC) STCLK (AVDEC) STENABLE (AVDEC) STVALID (AVDEC) NRST (AVDEC/PROG /VD/WMA/CPU) CLK16M (AD/WMA) WAITNODC (CPU) NINT (CPU)

CPUDT[0] (WMA/CPU) CPUDT[1] (WMA/CPU) CPUDT[2] (WMA/CPU) CPUDT[3] (WMA/CPU) CPUDT[4] (WMA/CPU) CPUDT[5] (WMA/CPU) CPUDT[6] (WMA/CPU) CPUDT[7] (WMA/CPU)

NWEL (AVDEC/WMA/CPU) NRE (AVDEC/WMA/CPU) NODCCS (CPU)

CPUADR[0] (CPU) CPUADR[1] (AVDEC/WMA/CPU) CPUADR[2] (AVDEC/WMA/CPU) CPUADR[3] (AVDEC/WMA/CPU) CPUADR[4] (AVDEC/WMA/CPU) CPUADR[5] (AVDEC/WMA/CPU) CPUADR[6] (AVDEC/WMA/CPU) CPUADR[7] (AVDEC/WMA/CPU) CPUADR[8] (AVDEC/WMA/CPU) CPUADR[9] (AVDEC/WMA/CPU) CPUADR[10] (AVDEC/WMA/CPU) CPUADR[11] (AVDEC/WMA/CPU) CPUADR[12] (WMA/CPU) CPUADR[13] (WMA/CPU) CPUADR[14] (WMA/CPU) CPUADR[15] (WMA/CPU) CPUADR[16] (WMA/CPU) CPUADR[17] (WMA/CPU)

C2015 0.1

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
NODC SECTION
(MODULE P.C.B.(1/7))
SCHEMATIC DIAGRAM

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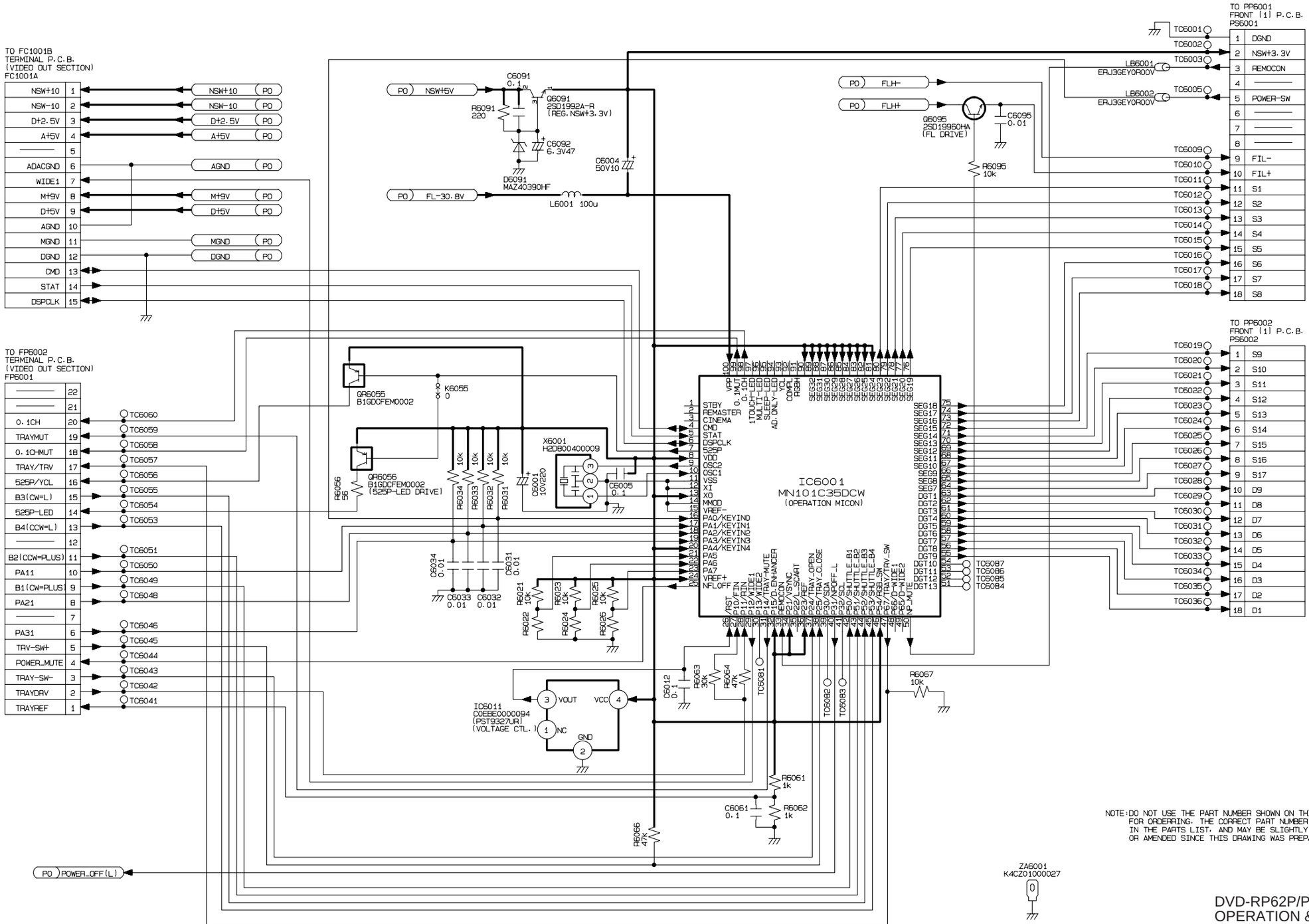
AD SECTION:Page J WMA SECTION:Page K CPU SECTION:Page L



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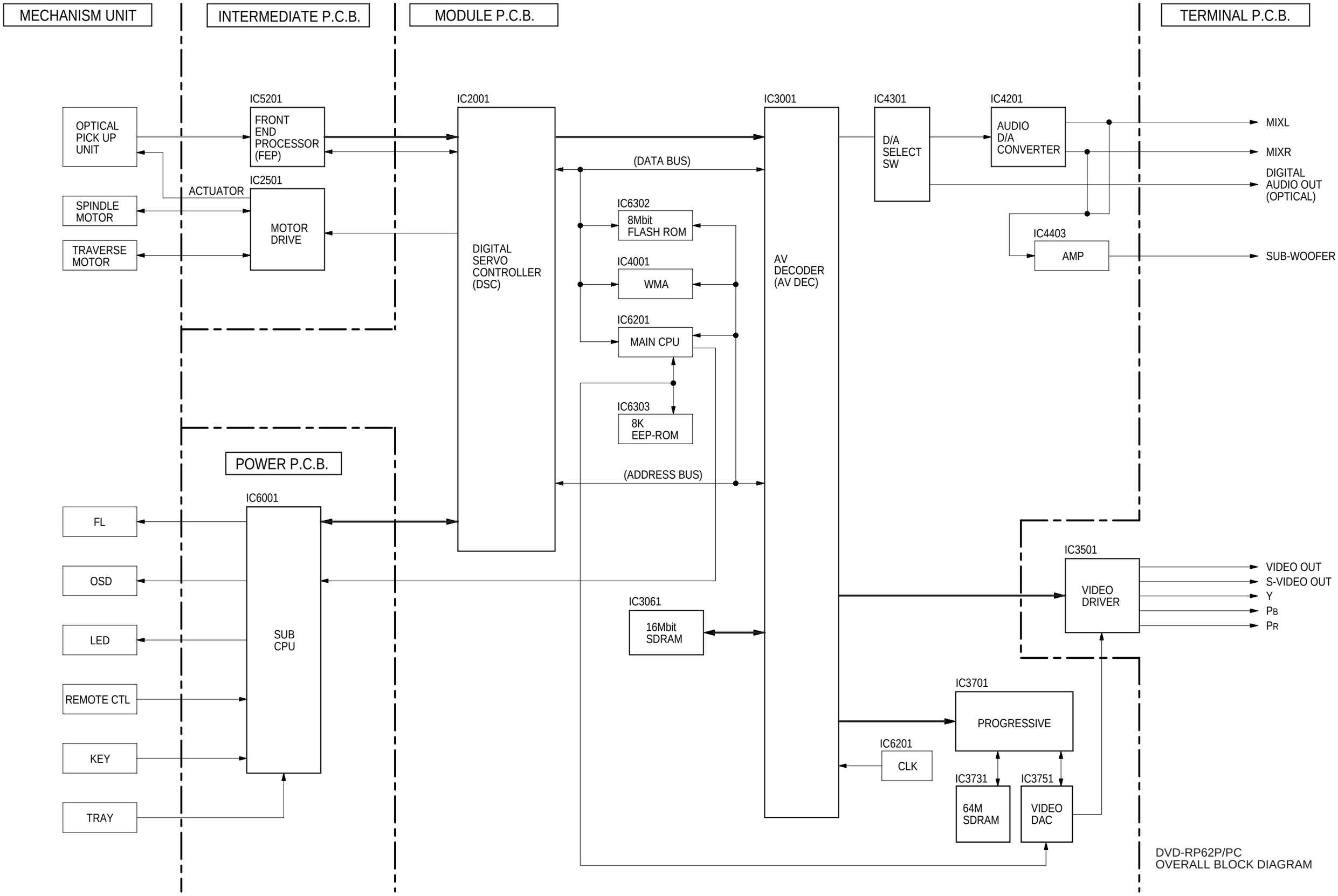
DVD-RP62P/PC
OPERATION & FL SECTION
(POWER P.C.B.(2/2))
SCHEMATIC DIAGRAM



DVD-RP62P/PC
OVERALL BLOCK DIAGRAM

PRIMARY CIRCUIT

SECONDARY CIRCUIT

AC SOCKET
P1001

DZ1001
D1001
SURGE SUPPRESSOR & SURGE ABSORBER

D1002
SURGE KILLER

F1001

L1001
LINE FILTER

D1011,C1011
RECTIFIER

T1021
POWER TRANSFORMER

20 NSW-10V

19 NSW+10V

IC1125
(REG.D+2.5V)
18 → 1 IN OUT 3 → D+2.5V
ON/OFF 2

Q1115
15 → S REG.+5V D → A+5V, D+5V
G

IC1151
(REG.M+9V)
14 → 1 IN OUT 3 → M+9V
ON/OFF 2

13 FL-30.8V

FL(DL6001)
Q6095
FL DRIVE
11 → F+
12 → F-
1G-9G
P1-P17

Q1021,Q1052
CONSTANT VOLTAGE CONTROL

Q1051
PHOTO COUPLER

IC1101
SHUNT REG.
NSW+5V

X6001
9 OSC2
10 OSC1

S6161
COUNT
S6162
DIRECTION
C
1
2
42 B1
43 B2
44 B3
45 B4
SHUTTLE

IC6001
(OPERATION MICON)

40 P.OFF Ⓛ

55 DGT9
63 DGT1
80 SEG23
64 SEG7

525P 7 → QR6056 525P-LED DRIVE → D6153 → 525P

IC6101
REMOCON 33 → 1 IR RECEIVER

KEYIN2 18 — PA21
KEYIN1 17 — PA11
KEYIN3 19 — PA31
KEYIN0 16

POWER S6101

ADVANCED SURROUND S6159
QUICK-REPLAY S6154
STOP S6153
PLAY S6152
PAUSE S6151
OPEN/CLOSE S6155

FWD-SKIP S6156
RVS-SKIP S6157
PROGRESSIVE OUT S6158

DVD-RP62P/PC
POWER BLOCK DIAGRAM

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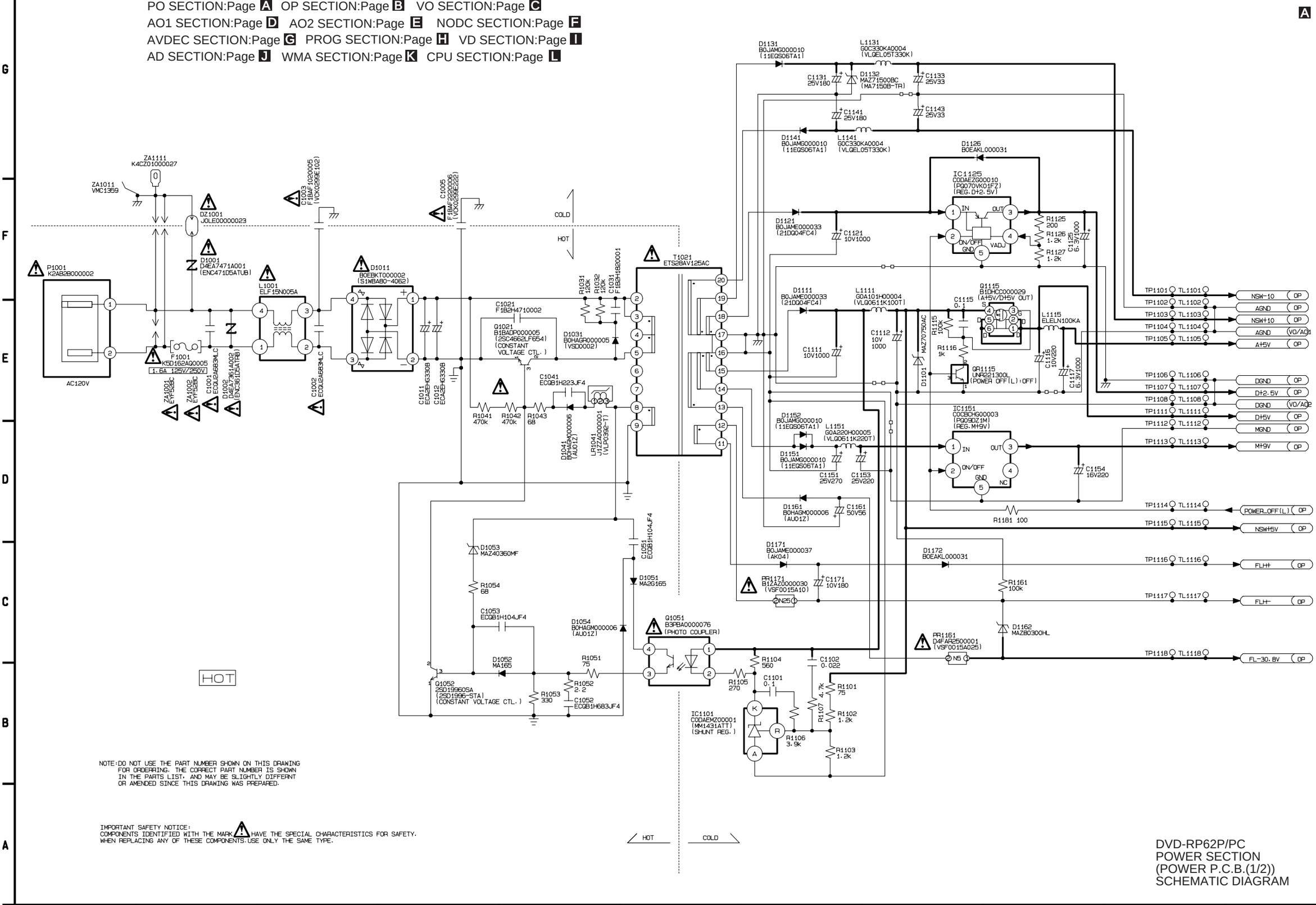

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS.USE ONLY THE SAME TYPE.

DVD-RP62P/PC
POWER SECTION
(POWER P.C.B.(1/2))
SCHEMATIC DIAGRAM

PO SECTION:Page A OP SECTION:Page B VO SECTION:Page C
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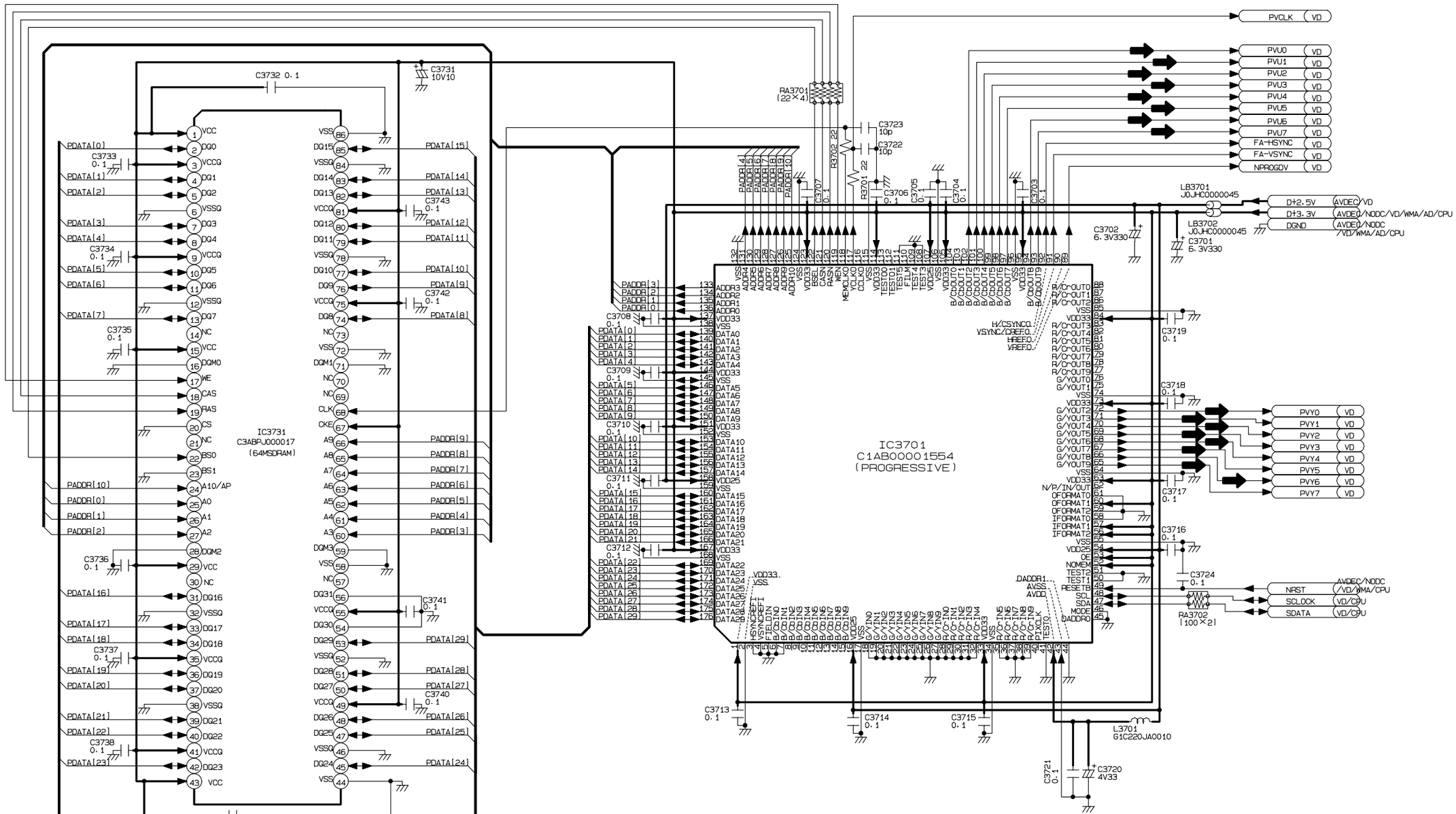
AVDEC SECTION:Page G PROG SECTION:Page H VD SECTION:Page I
AD SECTION:Page J WMA SECTION:Page K CPU SECTION:Page L

VIDEO SIGNAL PATH



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DVD-RP62P/PC
PROGRESSIVE SECTION
(MODULE P.C.B.(3/7))
SCHEMATIC DIAGRAM

OPTICAL PICK UP UNIT

PHOTO DETECTOR

B1 B2 A1 A2 A4 A3 B4 B3

HEAD AMP

LASER DIODE

LASER DIODE

Q5211

LD DRIVE

Q5215

LD DRIVE

LPC AMP

IC5201 (FEP)

VIN7 40
VIN8 41
VIN1 43
VIN2 44
VIN3 45
VIN4 46
VIN5 38
VIN6 39
VIN9 47
VIN10 48

AMP
AMP
EQ HPF COMP.
EQ HPF COMP.
EQ HPF COMP.
EQ HPF COMP.
DEFFERENTIAL PHASE DET.
DEFFERENTIAL PHASE DET.
AMP
AMP
AMP
AMP
FBAL
TBAL
VREF
VREF

PEAK
HOLD

RFINP 32
RFINN 33
TESTSG
VREF
DCRF

DPDOFT DET.
LEVEL CONT.
POFLT

MIRROR DET.
LEVEL CONT.
BDO DET.
LEVEL CONT.

ENV DET.
CSAG
DCAGC
AGC CONT.
BDOSL
AGCG
FC CONT.
BOOST CONT.
EQ
VGA
GD CONT.

SCK 10
SEN 9
STDI0 11
S-IF
REG

RSCL
S LINE

36 RFENV → 35 RFENV
13 TE → 31 TE
7 TBAL → 4 TBAL
20 FE → 30 FE
6 FBAL → 1 FBAL
16 BDO → 17 BDO
15 OFTR → 16 OFTR
21 FS → 32 AS
26 DFLTON → 47 ARF
27 DFLTOP → 49 NARF

IC2001 (DSC)

18 SEN
SCK 20 SCK
STDI 89 STDI

A
B

DVD-RP62P/PC
SERVO BLOCK DIAGRAM

RF SIGNAL
MOTOR DRIVE SIGNAL
TRACKING ERROR SIGNAL
FOCUS ERROR SIGNAL

IC2001 (DSC)
(A)

IC2501
(MOTOR DRIVE)

TVDP TVD1 (9) TRVSIN → (26) TRIN
TRDP TRD (7) TRIN → (2) VIN1
FODP FOD (5) FOIN → (3) VIN2
SPOUT SPD (11) SPDIN → (23) VIN3
FG (19) DMV/FG ← (6) OPOUT
FROM IC6001-27,28PIN → (24) LDIN
TRDM GI02 (8) MUTE3 → (27) CH3 MUTE
FODM GI01 (6) MUTE12 → (9) CH1,2 MUTE

BIAS1
BIAS2

LEVEL SHIFT

VO4+ (15) → M2502 TRAVERS MOTOR
VO4- (16)
OPIN+ (4)
VO3+ (17) → M2501 SPINDLE MOTOR
VO3- (18)
OPIN- (5)
VO1+ (14)
VO1- (13)
VO2+ (12)
VO2- (11)

IC2511-11,12,13,14
7.2Vp-p(20usec./div.)

OPTICAL PICK UP UNIT
ACTUATOR
TRACKING COIL
FOCUS COIL
ACT T+
ACT T-
ACT F+
ACT F-

IC3001
(AV DECORDER)
DD0 (104) (100) (97) (96) DD7 (95)
(83) STD0 (80) (78) (75) STD7

IC6201
(SYSTEM CTL.)
P85/SBT4 (53) → (6) SCL
P87/SB04 (56) → (5) SDA
P80/DAC0 (48)

IC6303
(EEPROM)

IC6001
(SUB CPU)
CNT → LD CNT (28) ← TRAY/TRV (47) P67/TRAY/TRV SW
CH4 MUTE → MUTE4 (20) ← TRAYMUT (31) P14/TRAY-MUTE
SW2501 → TRV-SW+ (38) P25/TRAY CLOSE
FROM P6005-1PIN → TRAY-SW- (37) P24/TRAY OPEN

(B)

DVD-RP62P/PC
SERVO BLOCK DIAGRAM

DVD-RP62P/PC
SERVO BLOCK DIAGRAM

MAIN SIGNAL PATH

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IC2501
COGB62000033
(BA5833FM-E2)
(MOTOR DRIVE)

BIAS1 LDCNT
VIN1 MUTE3
VIN2 TRIN
OPIN+ BIAS2
OPIN- LDIN
OPOUT VIN3
GND(Pre) PREVCC
FIN FIN
VCC(ch1.2) VCC(ch3.4)
MUTE12 MUTE4
GND(ch1.2) GND(ch3.4)
VO2- VO3-
VO2+ VO3+
VO1- VO4-
VO1+ VO4+

R2502 15k
C2507 0.1
R2503 15k
C2508 0.1
C2506 0.1
C2501 6.3V 220
C2504 0.1
C2509 16V10
C2513 0.1
C2503 16V22
R2507 6.8
C2505 0.1
C2502 16V100
R2505 82k
R2504 82k

TC2522 TC2523
DM MOTOR
M2501
C2511 0.1
TC2525 TC2524
TRVS MOTOR
M2502
C2512 0.1

RA2501 (47k×4)
SW2501 RSH1A048-A

TO FP2001 MODULE P.C.B. (ADSC) FP5202

TP5201	1	DGND
TP5202	2	DGND
	3	D+5V
TP5203	4	D+5V
	5	M+9V
	6	M+9V
TP5204	7	M+9V
	8	MGND
	9	MGND
	10	MGND
	11	MGND
TP5205	12	MUTE12
TP5206	13	MUTE4
TP5207	14	DMV/FG
TP5208	15	FOIN
TP5209	16	TRIN
TP5210	17	SPDIN
TP5211	18	TRAYIN
TP5212	19	TRAYREF
TP5213	20	TRVSIN
TP5214	21	MUTE3
TP5215	22	TRAY/TRV
TP5216	23	IN-SW
TP5217	24	LDCUR
TP5218	25	VREF2
TP5238	26	A+5V
TP5219	27	RFENV
TP5220	28	TSTSG
TP5221	29	NARF
TP5222	30	ARF
TP5223	31	AGND
TP5224	32	A+3.3V
	33	A+3.3V
TP5225	34	VHALF
TP5226	35	FS
TP5227	36	FE
TP5228	37	TE
	38	AGND
TP5229	39	BDO
TP5230	40	OFTR
TP5231	41	FEPDATA
TP5232	42	FEPCLK
TP5233	43	FEPENB
	44	AGND
TP5234	45	TBAL
TP5235	46	FBAL
	47	AGND
TP5236	48	GAINH/L
TP5237	49	HFMON
	50	AGND

TO OPTICAL PICKUP UNIT FP5201

T+	30	TC5225
F+	29	TC5224
F-	28	TC5223
T-	27	TC5222
3.3VHFM	26	TC5221
GND	25	TC5220
LD+(DVD)	24	TC5219
GND	23	TC5218
GND	22	TC5217
RFP	21	TC5216
RFN	20	TC5215
F1(DVD)	19	TC5214
F2(DVD)	18	TC5213
GAINH/L	17	TC5212
PIN(DVD)	16	TC5211
VREF2.2(DVD)	15	TC5210
TA(DVD)	14	TC5209
TD(DVD)	13	TC5208
TC(DVD)	12	TC5207
TB(DVD)	11	TC5206
VCC5V	10	TC5205
FE1	9	TC5204
GND	8	TC5203
LD+(CD)	7	TC5202
T1(CD)	6	TC5201
VREF2.2(CD)	5	
FE2(CD)	4	
T2(CD)	3	
PIN(CD)	2	
GND	1	

C5251 0.1
C5252 10V10
LB5206 VLP0323A601R
C5253 4.7k
LB5205 VLP0323A601R
LB5204 VLP0155-T
LB5203 VLP0155-T
C5223 0.1
LB5202 VLP0323A601R
LB5201 G1CYYZ00003

C5225 0.1
C5224 0.1
TC5230 R5217 47k R5213 47k TC5229
R5212 27
C5211 6.3V47
R5211 2.2
R5216 27
C5215 6.3V47
R5215 2.2
Q5211 2SB1115-T (LD DRIVE)
R5214 22k
Q5215 2SB1115-T (LD DRIVE)
TC5227

C5203 0.1
C5221 0.1
C5205 1000p
C5206 1000p
C5207 1000p
C5208 1000p
R5221 8.2k
R5222 8.2k

R5236 0
C5240 560p
R5235 1M
C5239 0.1
C5238 0.22
C5236 1000p
C5237 0.1
TC5226
C5201 16V10
L5201 ELJEA100KF
C5204 0.1
C5202 16V10
L5202 ELJEA100KF
C5235 390p
C5234 2200p
C5233 0.1
R5232 12k
C5232 0.1

IC5201
AN8708FHK
(FEP)

RFENV PEAK DCPF RFINN RFINP TESTSG AGCG DCAGC SAG FLTCN FLTOP VCC2
VCC1 VIN5 VIN6 VIN7 VIN8 VREF2 VIN1 VIN2 VIN3 VIN4 VIN9 VIN10
BDOSL OFTSL VHALF FS FE GND2 RSCL VDD BDO OFTR VSS TE
GND1 LPC1 LPC01 LPC2 LPC02 FBAL TBAL PDFLT SEN SCK STDIO VREF1

C5242 4700p
C5231 100p
RA5231 (100×4)
R5203 56k
R5204 22k
R5252 1k

D5251 MA2J72800L
QR5251 B1GD0FEE0001 (SWITCHING 3.3VHFM)
L5251 ELJEA100KF

DVD-RP62P/PC
INTERMEDIATE
SCHEMATIC DIAGRAM

G F E D C B A

1 2 3 4 5 6 7 8 9 10

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VIDEO SIGNAL PATH I

IC6251
C0CB0GE00002
(REG. D+3.3V)
C6251 0.1
C6252 10V10
D+3.3V
DGND
NODC/AVDEC/PROG/WMA/AD/CPU
FL6255 F1J1E1040022
FL6253 F1H0J1050018
C6257 6.3V100
NODC MGND
NODC D+5V
NODC/AVDEC/PROG/WMA/AD/CPU DGND
FL6251 F1H0J1050018
FL6254 F1H0J1050018
NJ3091
AVDEC/PROG D+2.5V
NODC/AVDEC/PROG/WMA/AD/CPU DGND
NODC/AVDEC A+5V
NODC/AD AGND
AVDEC VGND
AVDEC C
K3201 0
K6254 0
CPU DSPCLK
CPU STATUS
CPU CMD
LB3202 ERJ3GEYJ101V
LB3203 ERJ3GEYJ101V
LB3204 ERJ3GEYJ101V
LB3201 ERJ3GEY0R00A
LB3205 ERJ3GEY0R00A
LB3207 ERJ3GEY0R00A
LB3208 ERJ3GEY0R00A
LB3210 ERJ3GEY0R00A

TO PP3201
MOTHER P.C.B.
(VIDEO OUT SECTION)
PS3201

1	CB/PB/B
2	VGND
3	DSPCLK
4	STATUS
5	CMD
6	DGND
7	M+9V
8	MGND
9	D+5V
10	DGND
11	D+2.5V
12	DGND
13	D+2.5V
14	DGND
15	A+5V
16	AGND
17	Y
18	VGND
19	C
20	VGND
21	CR/PR/R
22	Y/PY/G

TC3201 TC3202 TC3203 TC3204 TC3205 TP6257 TP6258 TP6255 TP6256 TP6253 TP6254 TP6259 TP6251 TP6252 TC3206 TC3207 TC3208 TC3209

C3201 4V100

AVDEC VOUTA5V
AVDEC VDAC3.3V
NODC/AVDEC/PROG/WMA/CPU NRST

RA3751 (330×4)
RA3752 (330×4)
RA3753 (330×4)
RA3754 (330×4)
PROG PVU0 PVU1 PVU2 PVU3 PVU4 PVU5 PVU6 PVU7
PROG PVY0 PVY1 PVY2 PVY3 PVY4 PVY5 PVY6 PVY7

C3759 0.1
C3751 0.1
C3752 0.1
C3753 0.1
C3754 0.1
C3755 0.1
C3762 0.1

IC3751
C1AB00001499
(VIDEO DAC)
VDD GND VDD GND U[0] U[1] U[2] U[3] U[4] U[5] U[6] U[7] ALSB
VREF RSET COMP DACB VAA DACA AGND DACC SDA SCL
RESETB
Y[0] Y[1] Y[2] Y[3] Y[4] Y[5] Y[6] Y[7]
NHSYNC NVSYNC DV/CLKOUT
VDD GND Y[0] Y[1] Y[2] Y[3] Y[4] Y[5] Y[6] Y[7] VAA_PLL CLKIN AGND_PLL

R3752 1k
R3753 1k
C3758 1
C3763 0.1
R3751 2.2k
C3757 0.1
C3756 0.1

R3773 1k
Q3771 2SA15320XL (AMP)
R3771 220
R3772 33
C3771 0.1
PY

R3768 1k
Q3766 2SA15320XL (AMP)
R3766 220
R3767 33
C3766 0.1
PR

R3763 1k
Q3761 2SA15320XL (AMP)
R3761 220
R3762 33
C3761 0.1
PB

C3770 6.3V100

C3261 0.1
IC3261
C0JBAR000290
(SWITCHING)
VDD INH VEE VSS
R3261 10k
QR3261 UNR521200L (INV.)

AVDEC CB/B
CPU PISEL
AVDEC CR/R
AVDEC Y

C3215 0.1
C3210 0.1
C3209 0.1

PROG FA-VSYNC
PROG FA-HSYNC
PROG NPROGDV
PROG PVCLK
RA3755 (330×2)
CPU/PROG SCLOCK
CPU/PROG SDATA
RA3756 (100×2)

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
VIDEO D/A CONVERTER SECTION
(MODULE P.C.B.(4/7))
SCHEMATIC DIAGRAM

FEP TERMINAL P.C.B.

MODULE P.C.B.

OPTICAL PICK UP UNIT

IC5201
(FEP)
VIN1 VIN2 VIN3 VIN4 VIN5 VIN6 VIN7 VIN8 VIN9 VIN10
VREF VREF
RF ENV (36)
HOLD
RFIN P/N
DCRF

IC2001
(NODC)
RFENV (35)
DD0 (104) DD1 (103) DD2 (102) DD3 (101) DD4 (100) DD5 (97) DD6 (96) DD7 (95)
CPUDT0 (81) ... CPUDT7 (74)
DATA
CPUDT(0-7)
NWR (73) NRO (72)
NWEL
NRE
ADDRESS
CPU ADR0 (70) → CPU ADR17 (53)

IC3001
(AV DECORDER)
STD0 (83) STD1 (82) STD2 (81) STD3 (80) STD4 (78) STD5 (77) STD6 (76) STD7 (75)
HA1 (35) ... HA11 (47)
ADDRESS

IC4001
(WMA)
D0 (99) ... D15 (123)
DATA
A0 (131) ... A16 (105)
ADDRESS
HR/W (18)
HDS1 (127)

IC4061
(CLK)
D (2) Q (5) CK (1)

IC4051
NRE (1)
VWEL (2)
SYSCLK

IC6302
(8M FLASH ROM)
DQ0 (29) ... DQ15/A-1 (45)
DATA
CPUDT(0-15)
A0 (25) ... A17 (17)
ADDRESS
XWE (11) XOE (28)

IC6201
(MAIN CPU)
A0 (13) ... A19/P43 (42)
ADDRESS
NCS2/PS2 (7) → XCS (32)
BOSC/PB0 (18) → HCLK (33)
NRE (2) → XRD (31)
NWEL/P62 (3) → XWR (30)
NAVCS
SYSCLK
DATA
D0 (64) ... D15 (100)

HD0 (49) ... HD15 (68)
DATA

IC3061
(16M SDRAM)
MEMORY ADDRESS 12bit
A0 (21) A1 (22) A2 (23) A3 (24) A4 (27) A5 (28) A6 (29) A7 (30) A8 (31) A9 (32) A10 (20) A11 (19)
MA0 (2) MA1 (4) MA2 (7) MA3 (10) MA4 (8) MA5 (6) MA6 (3) MA7 (207) MA8 (204) MA9 (201) MA10 (206) MA11 (203)
MEMORY DATA 16bit
DQ0 (2) DQ1 (3) DQ2 (5) DQ3 (6) DQ4 (8) DQ5 (9) DQ6 (11) DQ7 (12) DQ8 (39) DQ9 (40) DQ10 (42) DQ11 (43) DQ12 (45) DQ13 (46) DQ14 (48) DQ15 (49)
MDQ0 (159) MDQ1 (162) MDQ2 (165) MDQ3 (168) MDQ4 (171) MDQ5 (175) MDQ6 (178) MDQ7 (181) MDQ8 (180) MDQ9 (177) MDQ10 (173) MDQ11 (170) MDQ12 (167) MDQ13 (164) MDQ14 (161) MDQ15 (158)
XCS (18) XRAS (17) XCAS (16) XWE (15) CLK (35)
XCSM (199) XRAS (196) XCAS (195) XWE (193) MCK (185)

IC3001-129
0.68Vp-p(20usec./div.)

IC3001-124
0.64Vp-p(20usec./div.)

IC3001-134
1.2Vp-p(20usec/div)

IC3001-119
0.8Vp-p(20usec/div)

VYOUT (134) Y → (A)
VBOUT (119) C → (B)
VGOUT (124) CB/B → (C)
VCOUT (129) CR/R → (D)

QR6301
NRST
FROM IC6201-79PIN
XRST (12) NRST → (L)

DVD-RP62P/PC
VIDEO BLOCK DIAGRAM

MODULE P.C.B.

MOTHER P.C.B.

MAIN SIGNAL

IC3501-29,30
1.9Vp-p(20usec./div.)

IC3501-32
1.3Vp-p(20usec./div.)

IC3501-24,25
1.9Vp-p(20usec./div.)

IC3501
(VIDEO DRIVE)

YTRAP

6M LPF

CLAMP

CTRAP

1.5-6M BPF

6dB

75 Ω

YOUT

YFB

MIXOUT

MIXFB

COUT

JK4501
VIDEO OUT

JK4501
S-VIDEO OUT

FROM IC6001-29PIN

WIDE1

QR3521

Q3101 AMP Y

C

Q3116 AMP CB/B

Q3111 AMP CR/R

IC3261

Q3501,3502 AMP

Q3771 PY AMP

Q3761 PB AMP

Q3766 PR AMP

IC3751
(VIDEO DAC)

DACA

DACC

DACB

RESETB

SCL

SDA

Y[7] ← Y[0]

U[7] ← U[0]

NHSYNC

NVSYNC

DV/CLKOUT

CLKIN

FA-HSYNC

FA-VSYNC

NPROGDV

PVCLK

IC3701
(PROGRESSIVE)

G/YOUT9 ← G/YOUT2

B/CbOUT9 ← B/CbOUT2

H/CSYNC0

VSYNC/CREF0

VREF0

YCLK0

IC3731
(64M SDRAM)

ADDR10

ADDR0

DATA0

DATA29

WEN

CASN

RASN

BSEL

MEMCLKO

A10/AP

A0

A9

DQ0

DQ29

WE

CAS

RAS

BSO

CLK

FROM/TO IC6201-56PIN

FROM/TO IC6201-53PIN

SDATA

SCLOCK

NRST

IC3501-17,19
1.1Vp-p(20usec./div.)

CbTRAP

CBIN

CBOUT

JK4501

PB

CRIN

CROUT

PR

Y

PYTRAP

PYIN

12M LPF

PYOUT

PYFB

(Y)

DVD-RP62P/PC
VIDEO BLOCK DIAGRAM

VIDEO SIGNAL PATH
AUDIO SIGNAL PATH

C

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TO FC1001A
POWER P.C.B.
(OPERATION &
FL SECTION)
FC1001B

NSW+10V	1	TL1201
NSW-10V	2	TL1202
D+2.5V	3	TL1203
A+5V	4	TL1204
———	5	
ADACGND	6	TL1206
WIDE1	7	TL1207
M+9V	8	TL1208
D+5V	9	TL1209
AGND	10	TL1210
MGND	11	TL1211
DGND	12	TL1212
CMD	13	TL1213
STAT	14	TL1214
DSPCLK	15	TL1215

NSW+10 (AO1)
NSW-10 (AO1)
D+5V (AO2)
A+5V (AO1)
AGND (AO1)

IC3581
C0CAADE00007
(NJM78M05FA)
(REG.+5V)
1 IN OUT 3
GND 2
C3581 16V220
C3582 16V220
L3501 22u
C3501 6.3V220

TO PS3201
MODULE P.C.B.
(VIDEO DAC SECTION)
PP3201

PB/CB/B	1	
VGND	2	
DSPCLK	3	
STATUS	4	
CMD	5	
DGND	6	
M+9V	7	
MGND	8	
D+5V	9	
DGND	10	
D+2.5V	11	
DGND	12	
D+2.5V	13	
DGND	14	
A+5V	15	
AGND	16	
Y	17	
VGND	18	
C	19	
VGND	20	
PR/CR/R	21	
PY/Y//G	22	

L3201
ELELN100KA

VGND

R3521 2.2k
QR3521 UNR2212 (WIDE 1)
R3522 10k
C3531 0.01

IC3501
C9ZB00000377
(VIDEO BUFFER)

CFIL	1	COUT	32
MUTE	2	TEST	31
CIN	3	MIXOUT1	30
GND	4	MIXOUT2	29
YIN	5	GND	28
VCC1	6	YFIL	27
GND	7	GND	26
NC(PYIN)	8	YOUT1	25
GND	9	YOUT2	24
NC(PYFIL)	10	GND	23
VCC2	11	NC(PYOUT1)	22
CBIN	12	NC(PYOUT2)	21
GND	13	GND	20
CRIN	14	CBOUT	19
SEL	15	CBFIL	18
CRFIL	16	CROUT	17

C3504 0.01
C3505 16V47
C3502 0.01
C3506 16V47
C3507 16V47
C3508 16V47
C3503 0.01
L3503 0.39u
C3509 6.3V1000
C3510 6.3V100
C3511 6.3V1000
C3512 6.3V100
C3513 6.3V1000
C3514 6.3V100
C3515 6.3V330
C3516 6.3V330
L3505 0.68u
C3520 100p
C3533 0.01

R3504 2.2k
R3506 150
R3503 33
R3505 150
Q3502 2SD0601AHL (AMP)
Q3501 2SB0709AHL (AMP)
C3523 0.01
L3507 0.68u
C3522 100p
R3507 2.2k
C3524 82p
QR3501 UNR2212 (INV.)

R3531 75 LB3531 J0JBC0000015 COUT (AO2)
R3532 75 LB3532 J0JBC0000015 YOUT (AO2)
R3533 75 LB3533 J0JBC0000015 VOUT (AO2)
VGND (AO2)
R3534 75 LB3534 J0JBC0000015 Y (AO2)
R3535 75 LB3535 J0JBC0000015 PB (AO2)
R3536 75 LB3536 J0JBC0000015 PR (AO2)

TO FE6001
POWER P.C.B.
(OPERATION &
FL SECTION)
FP6002

———	22	
———	21	
0.1CH	20	0.1CH (AO2)
TRAYMUT	19	TRAYMUT (AO1)
0.1CHMUT	18	0.1CHMUT (AO2)
TRAY/TRV	17	TRAY/TRV (AO1)
525P/YCL	16	
B3(CW=L)	15	
525P-LED	14	
B4(CCW=L)	13	
———	12	
B2(CCW=PLUS)	11	
PA11	10	
B1(CW=PLUS	9	
PA21	8	
———	7	
PA31	6	
TRV-SW+	5	TRV-SW+ (AO1)
POWER_MUTE	4	POWER_MUTE (AO1)
TRAY-SW-	3	
TRAYDRV	2	TRAYDRV (AO1)
TRAYREF	1	TRAYREF (AO1)

TO
TRAY OPEN SWITCH
P6005

1	TRAY-SW-
2	DGND

10	———	
9	B4	
8	B3	
7	B2	
6	B1	
5	525P-LED	
4	PA31	
3	PA21	
2	PA11	
1	DGND	

TO PP6003
FRONT-(2) P.C.B.
PS6003

R3528 10k
QR3523 UNR2212
C3534 0.01

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
VIDEO OUT SECTION
(TERMINAL P.C.B.(1/3))
SCHEMATIC DIAGRAM

VIDEO SIGNAL PATH

AUDIO SIGNAL PATH

IC4001
TMS320C5410A
(WMA)

IC4021 C0CBCAC00025

IC4051 C0JBAA000260

IC4061 C0JBAF000367 (CLK)

IC4041 C0JBAA000260

IC4031 C0JBAR000294 (DIGITAL AUDIO SELECT SW.)

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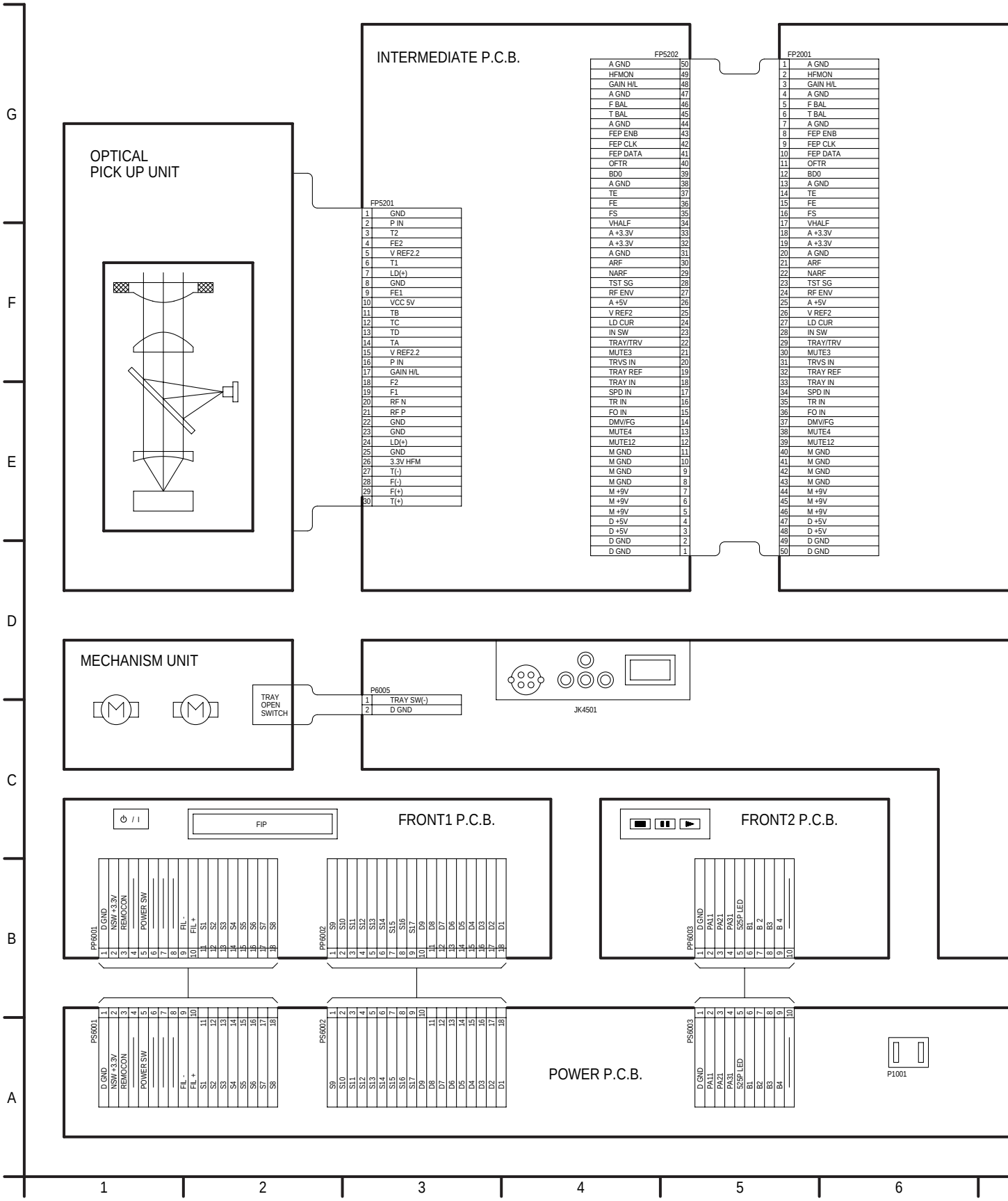
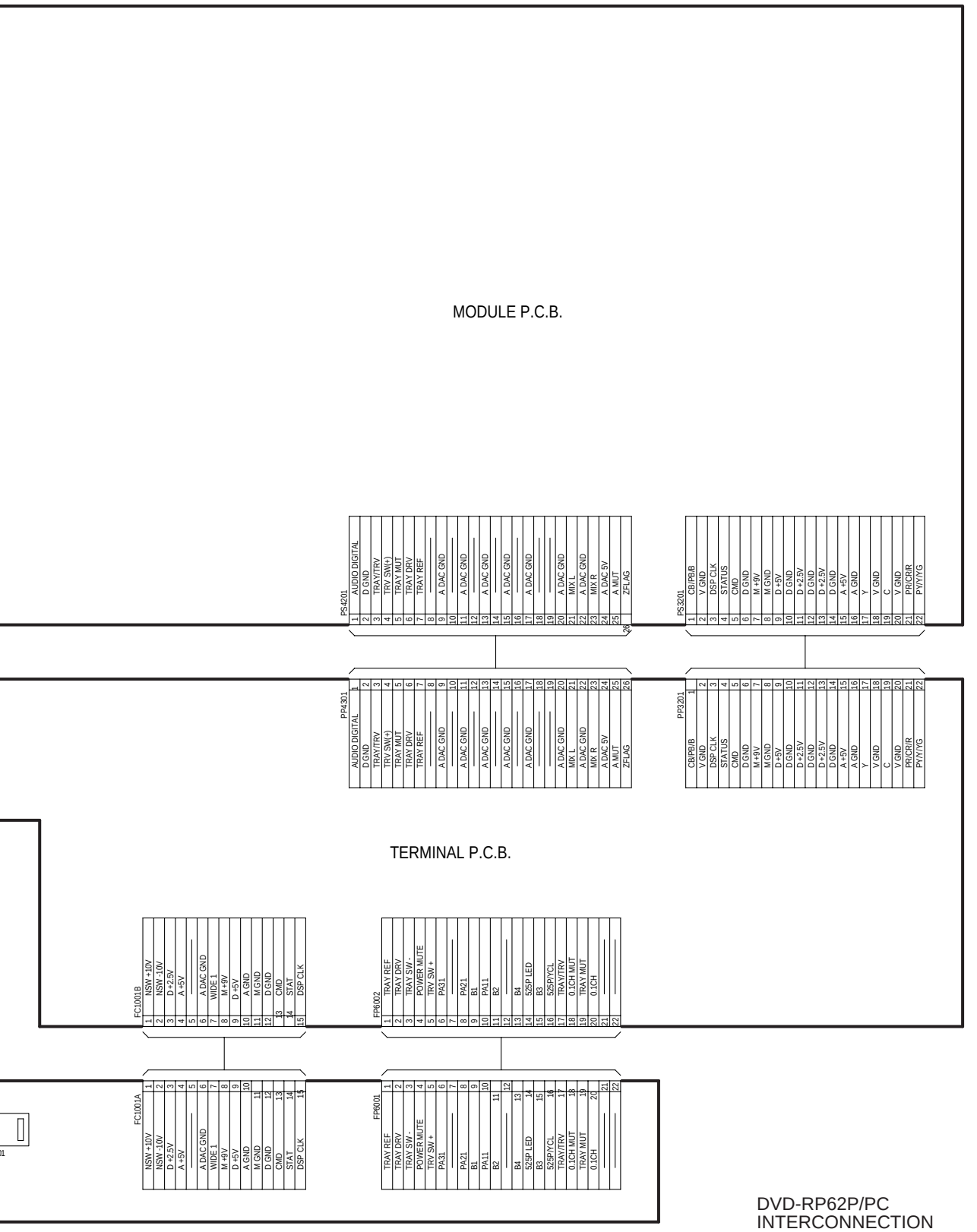
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
WMA SECTION
(MODULE P.C.B.(6/7))
SCHEMATIC DIAGRAM

15 SCHEMATIC DIAGRAM

15.1. INTERCONNECTION SCHEMATIC DIAGRAM




MODULE P.C.B.
PS4201
AUDIO DIGITAL
D GND
TRAY/TRV
TRV SW(+)
TRAY MUT
TRAY DRV
TRAY REF
A DAC GND
A DAC GND
A DAC GND
A DAC GND
A DAC GND
A DAC GND
A DAC GND
A DAC GND
MIX L
A DAC GND
MIX R
A DAC 5V
A MUT
ZFLAG
PS3201
CB/PB/B
V GND
DSP CLK
STATUS
CMD
D GND
M +9V
M GND
D +5V
D GND
D +2.5V
D GND
D +2.5V
D GND
A +5V
A GND
Y
V GND
C
V GND
PR/CR/R
PY/Y/YG
PP4301
PP3201
TERMINAL P.C.B.
FC1001B
NSW +10V
NSW -10V
D +2.5V
A +5V
A DAC GND
WIDE 1
M +9V
D +5V
A GND
M GND
D GND
CMD
STAT
DSP CLK
FP6002
TRAY REF
TRAY DRV
TRAY SW -
POWER MUTE
TRV SW +
PA31
PA21
B1
PA11
B2
B4
525P LED
B3
525P/YCL
TRAY/TRV
0.1CH MUT
TRAY MUT
0.1CH
FC1001A
FP6001
DVD-RP62P/PC
INTERCONNECTION
SCHEMATIC DIAGRAM
7
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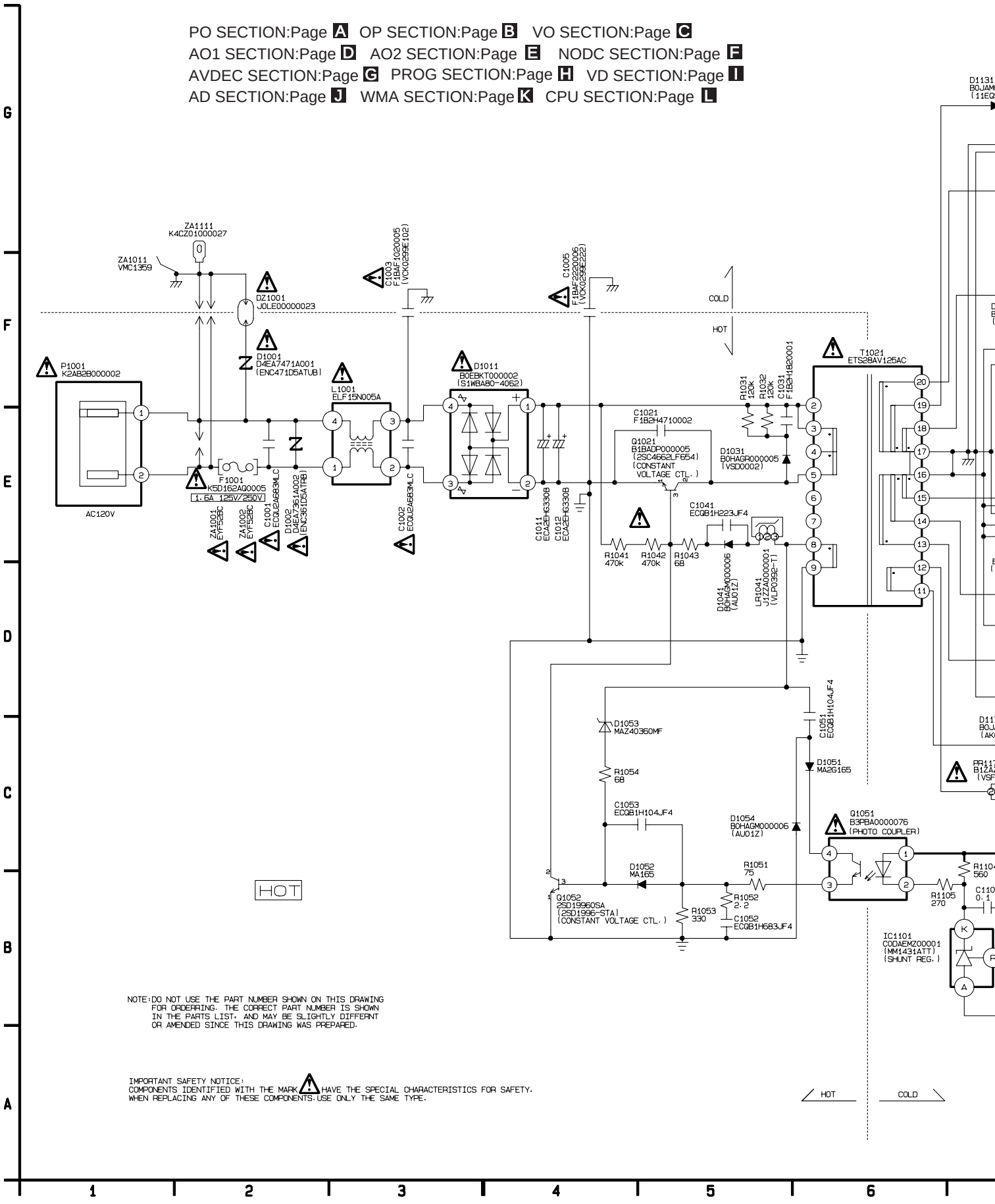
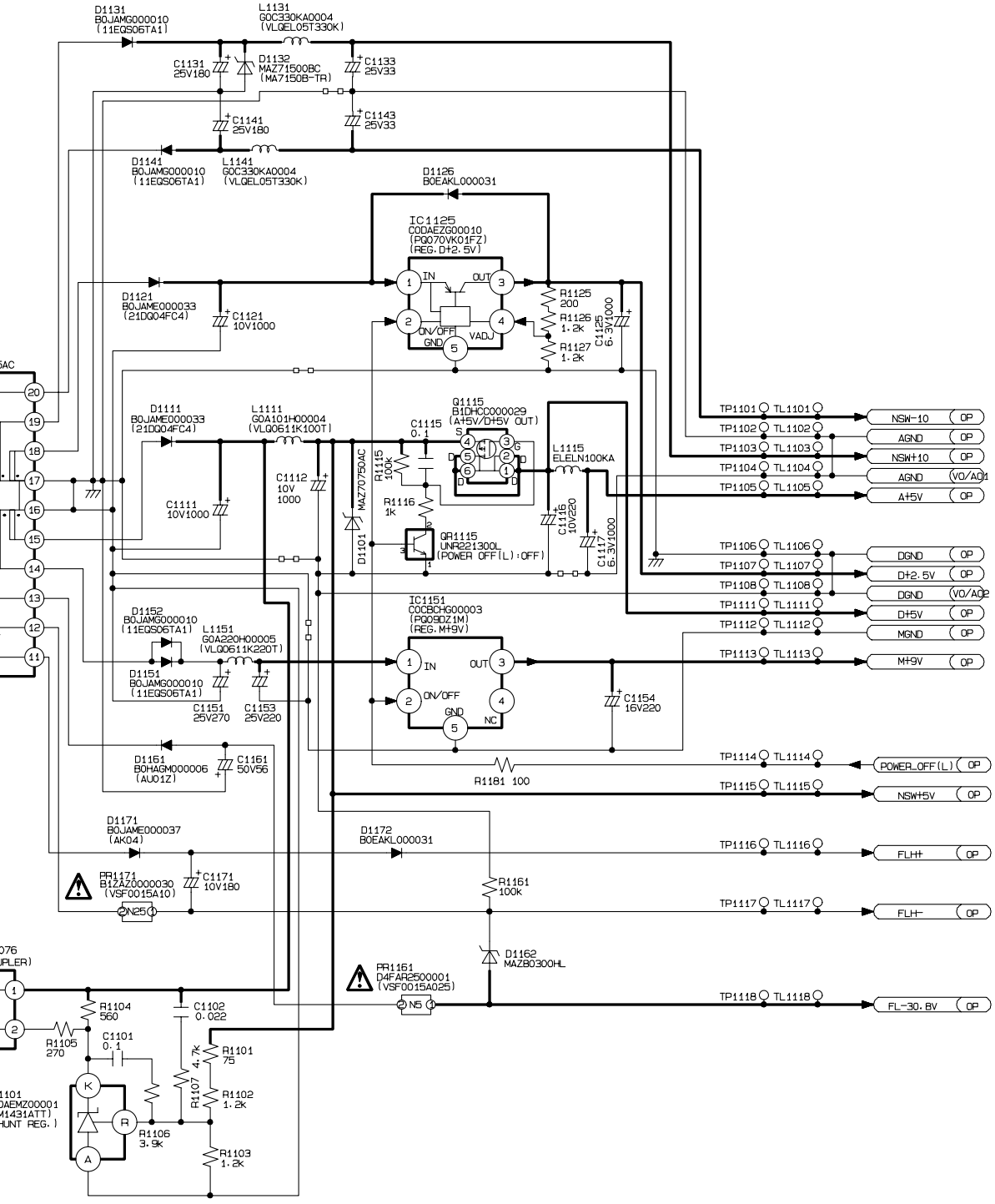
15.2. POWER SECTION (POWER P.C.B. (1/2)) SCHEMATIC DIAGRAM



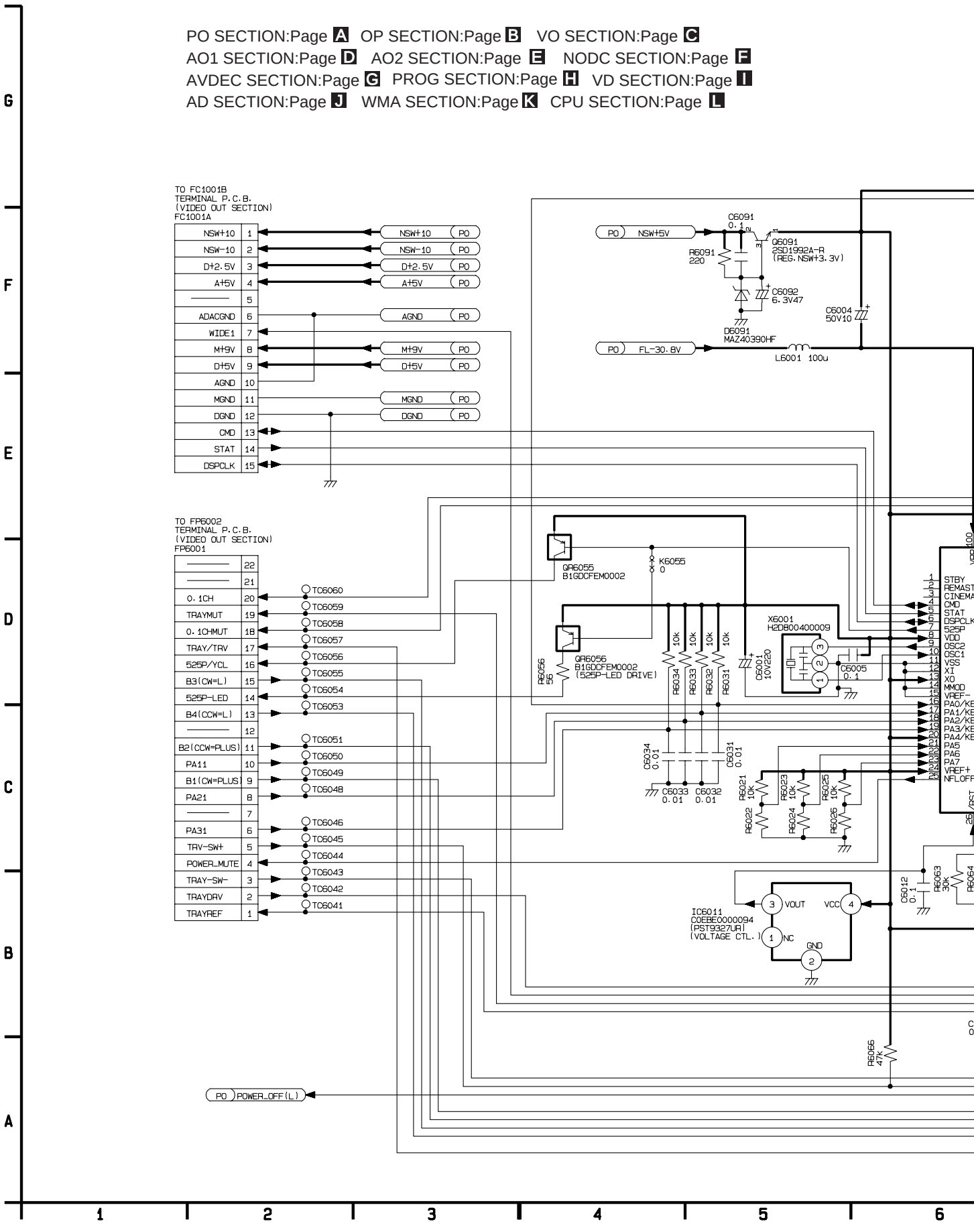


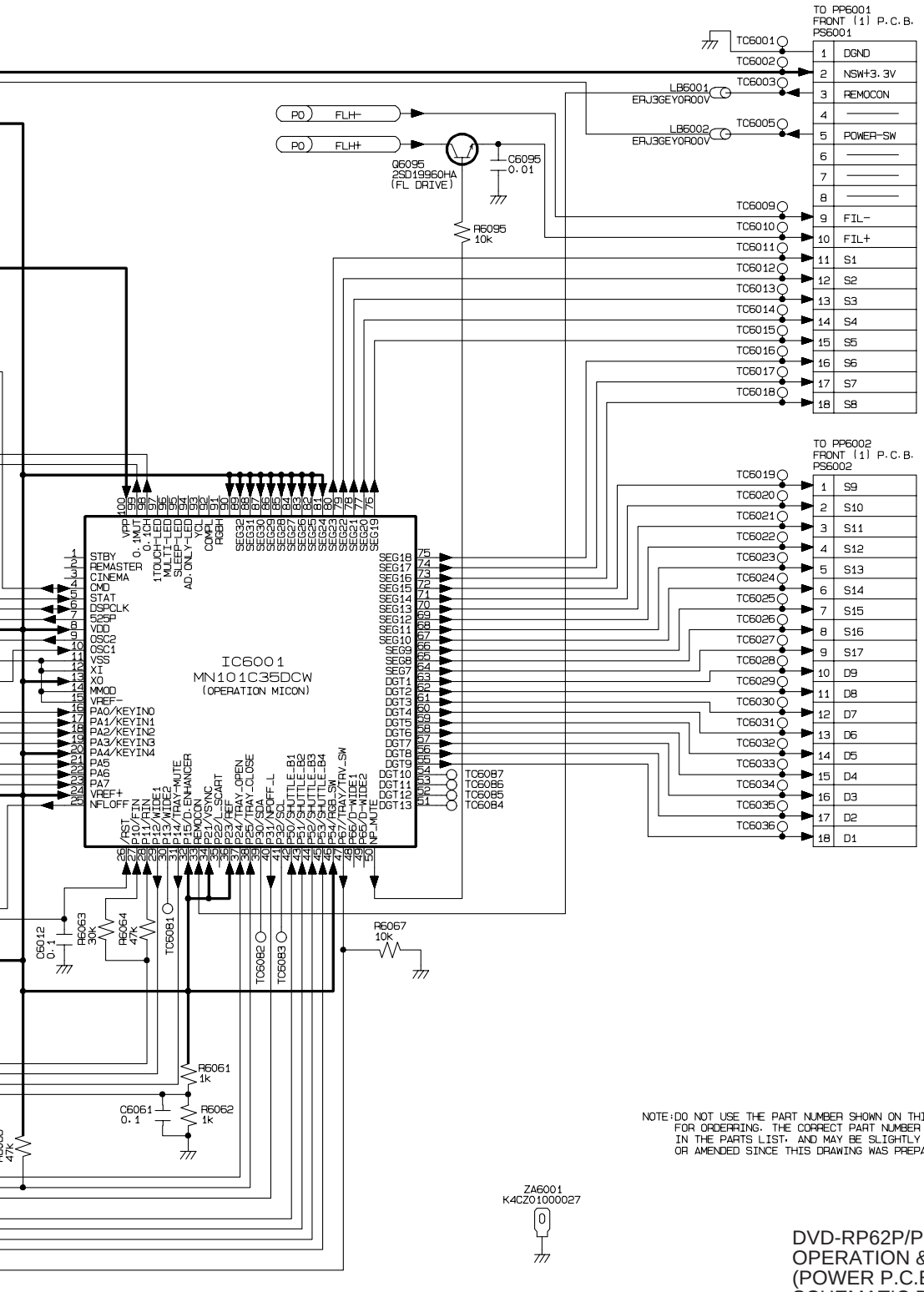
DVD-RP62P/PC
POWER SECTION
(POWER P.C.B.(1/2))
SCHEMATIC DIAGRAM

7 8 9 10 11

15.3. OPERATION & FL SECTION (POWER P.C.B. (2/2)) SCHEMATIC DIAGRAM

PO SECTION:Page A OP SECTION:Page B VO SECTION:Page C
AO1 SECTION:Page D AO2 SECTION:Page E NODC SECTION:Page F
AVDEC SECTION:Page G PROG SECTION:Page H VD SECTION:Page I
AD SECTION:Page J WMA SECTION:Page K CPU SECTION:Page L



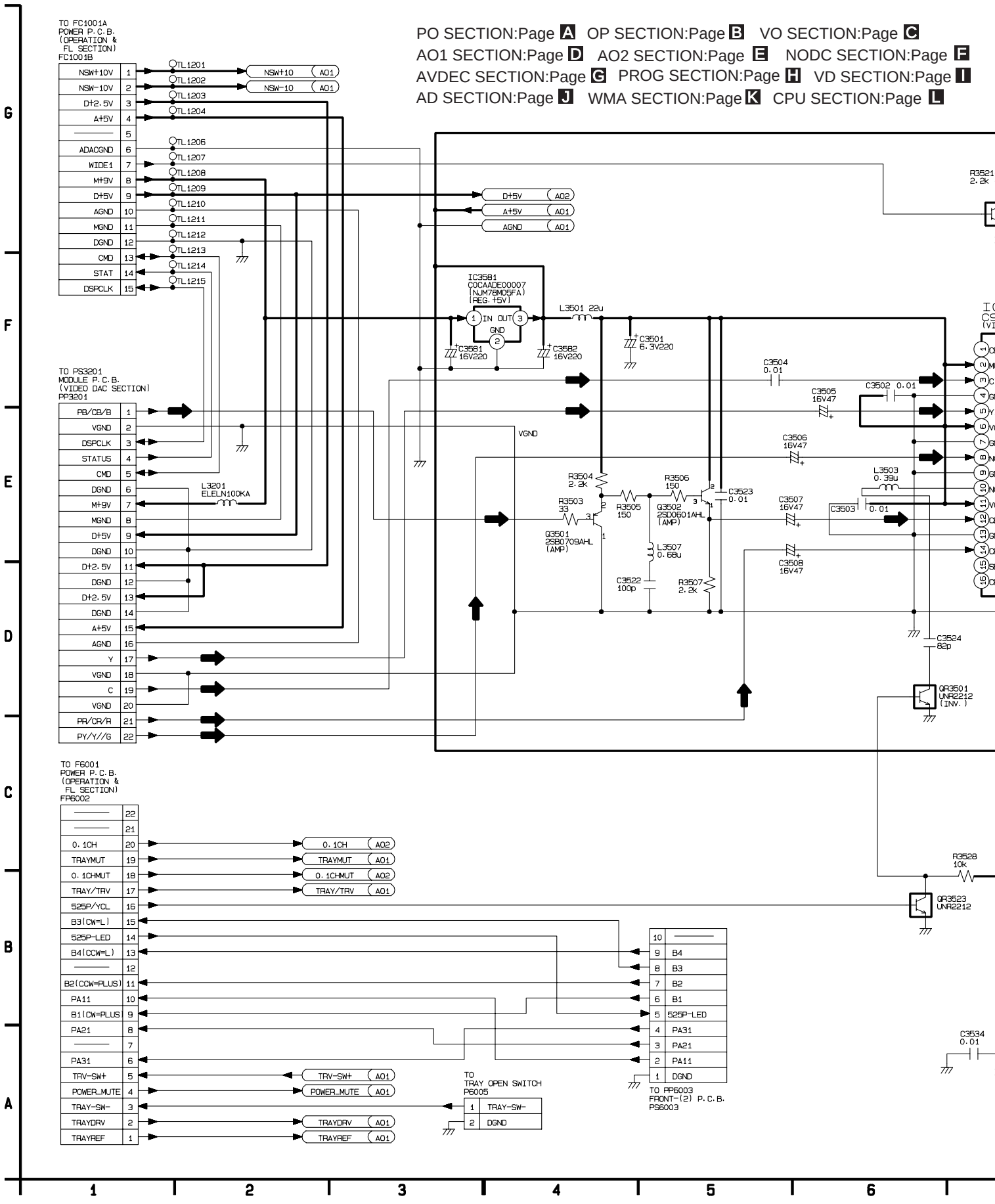


NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERARING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
OPERATION & FL SECTION
(POWER P.C.B.(2/2))
SCHEMATIC DIAGRAM

6 7 8 9 10

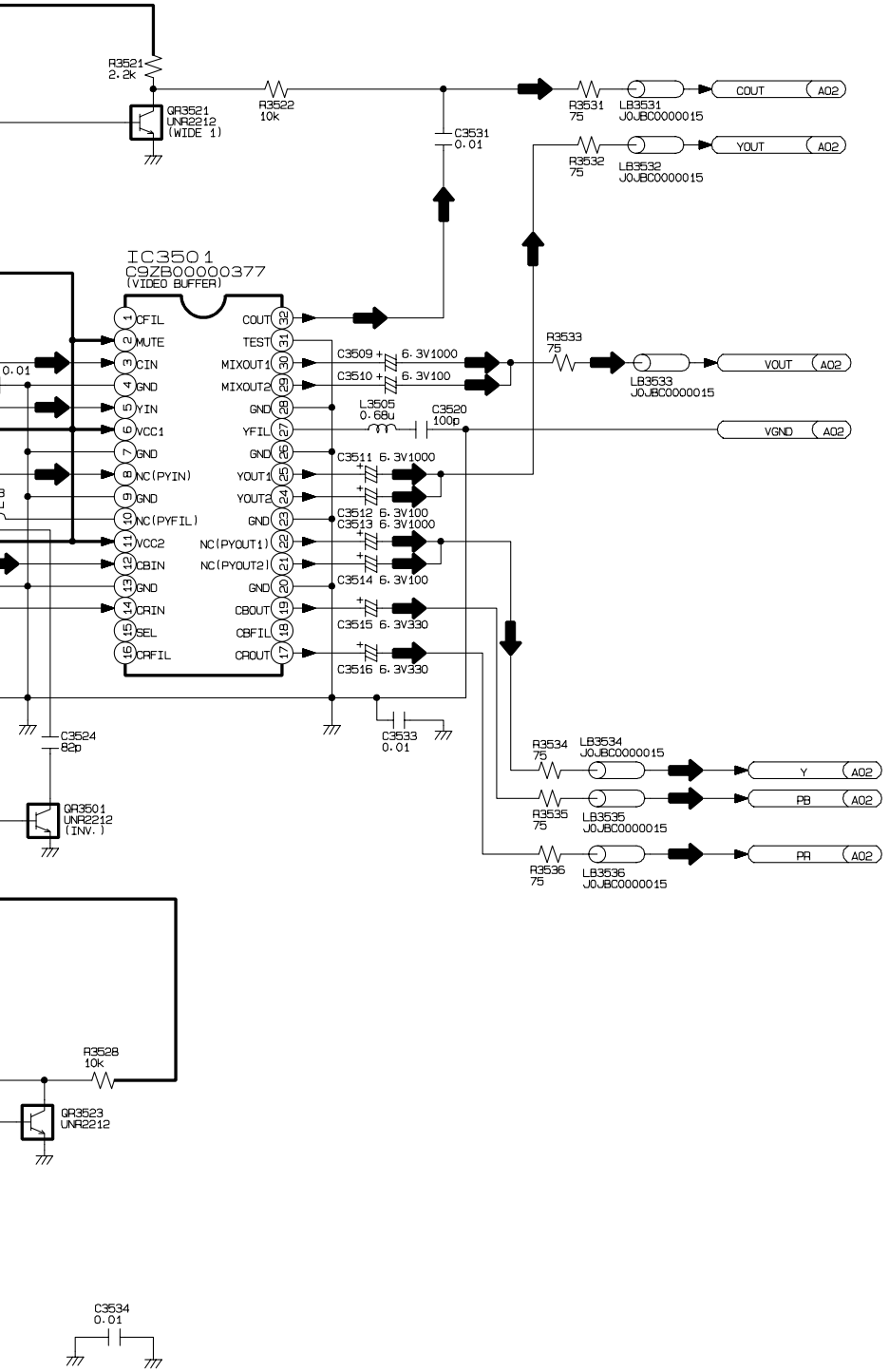
15.4. VIDEO OUT SECTION (TERMINAL P.C.B. (1/3)) SCHEMATIC DIAGRAM



e C
N:Page F
ON:Page I
age L

VIDEO SIGNAL PATH
AUDIO SIGNAL PATH

C

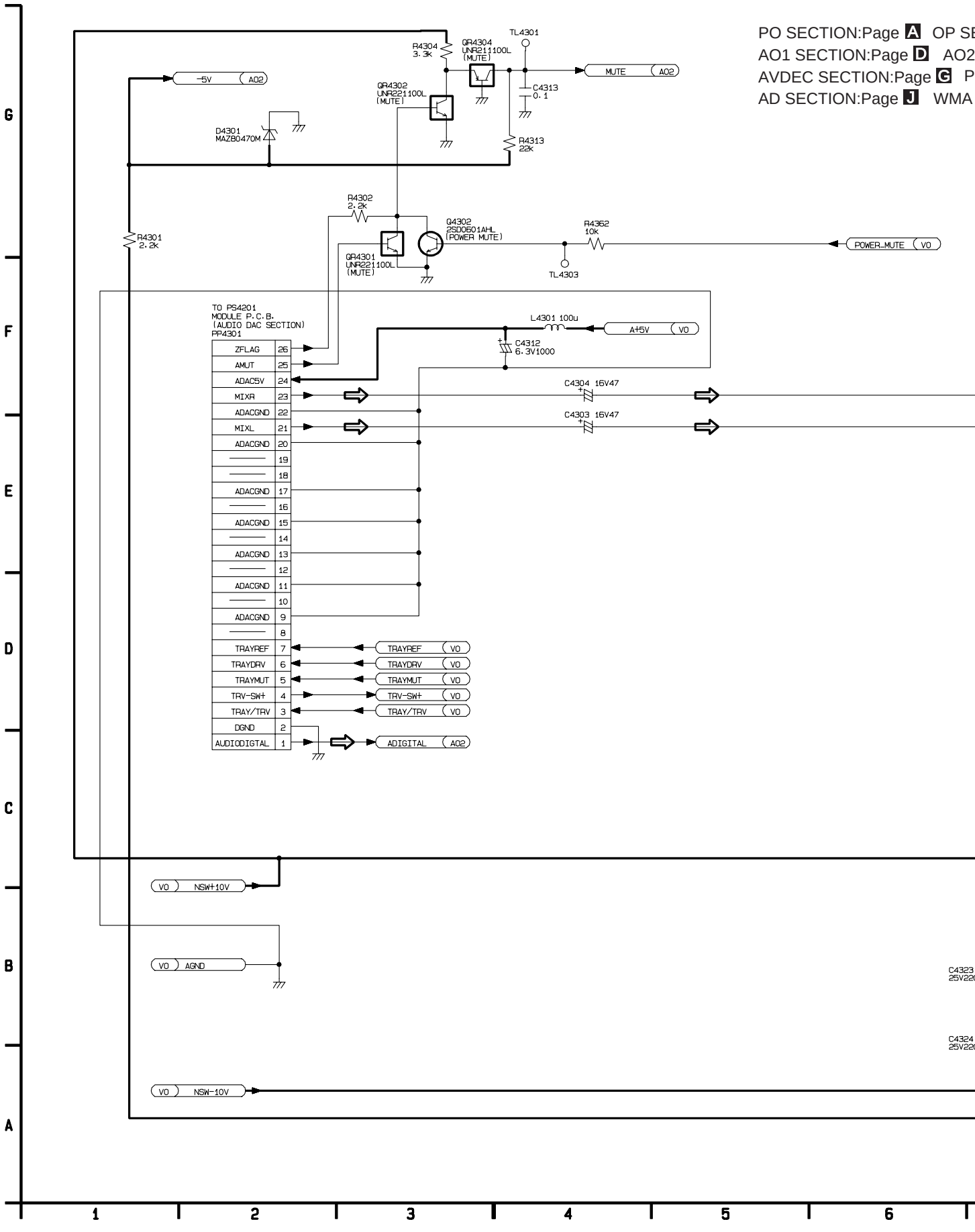


NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
VIDEO OUT SECTION
(TERMINAL P.C.B.(1/3))
SCHEMATIC DIAGRAM

7 8 9 10 11

15.5. AUDIO OUT 1 SECTION (TERMINAL P.C.B. (2/3)) SCHEMATIC DIAGRAM

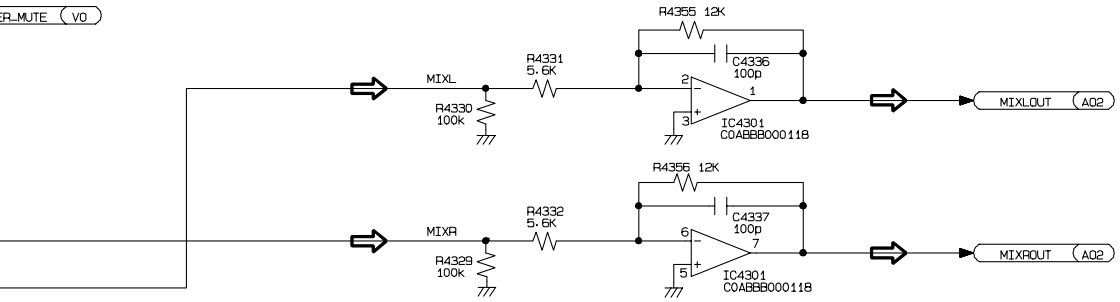


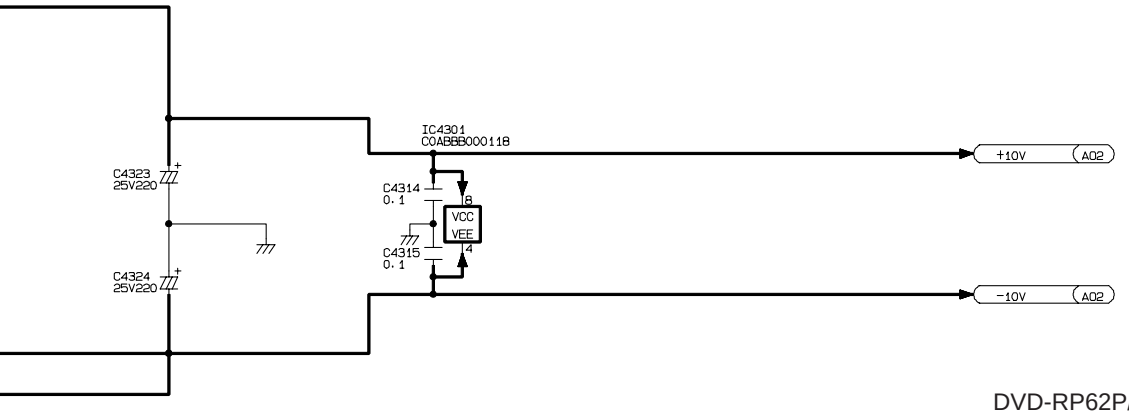
GRAM

age A OP SECTION:Page B VO SECTION:Page C
Page D AO2 SECTION:Page E NODC SECTION:Page F
ON:Page G PROG SECTION:Page H VD SECTION:Page I
age J WMA SECTION:Page K CPU SECTION:Page L

AUDIO SIGNAL PATH

D



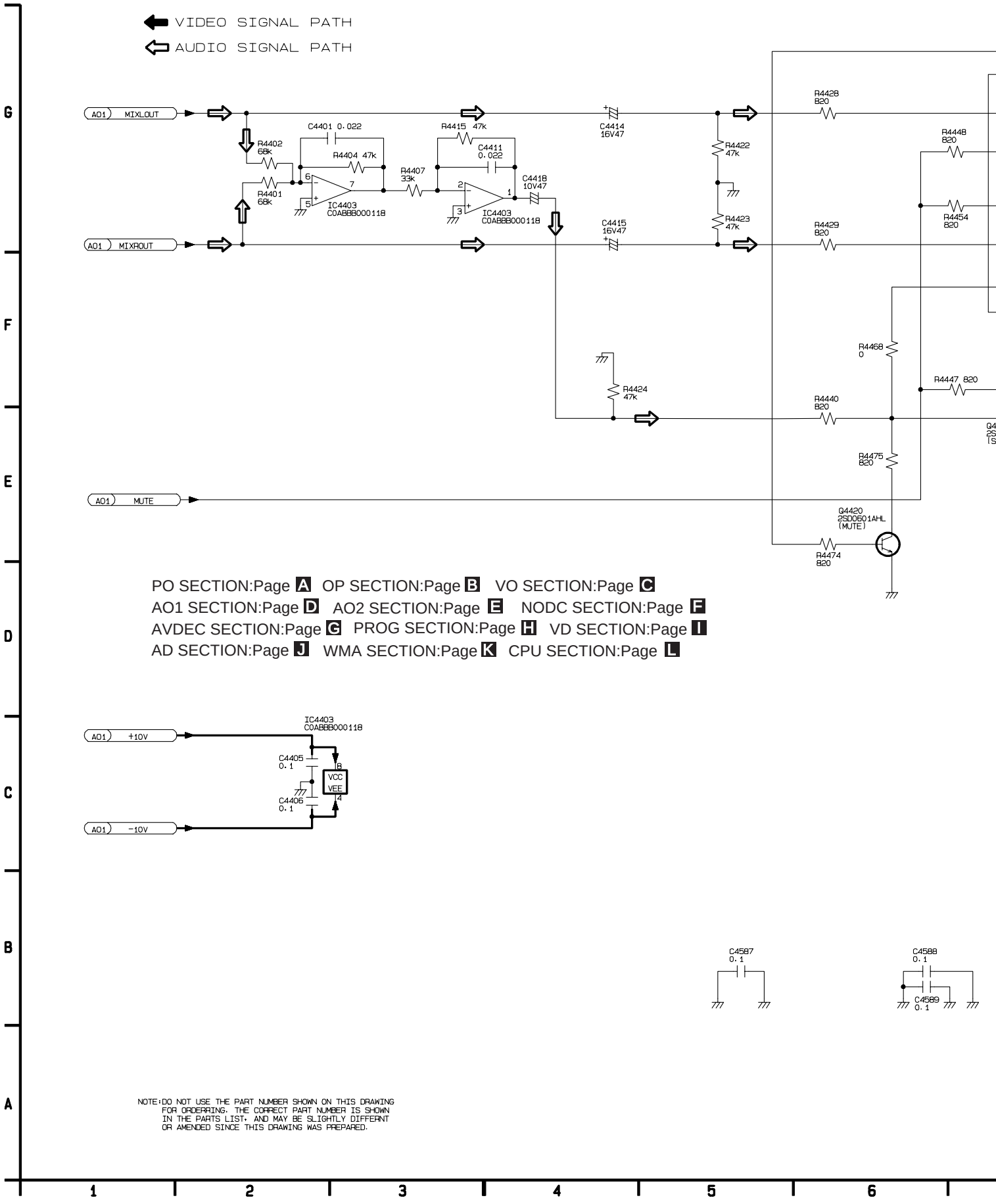


NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
AUDIO OUT 1 SECTION
(TERMINAL P.C.B.(2/3))
SCHEMATIC DIAGRAM

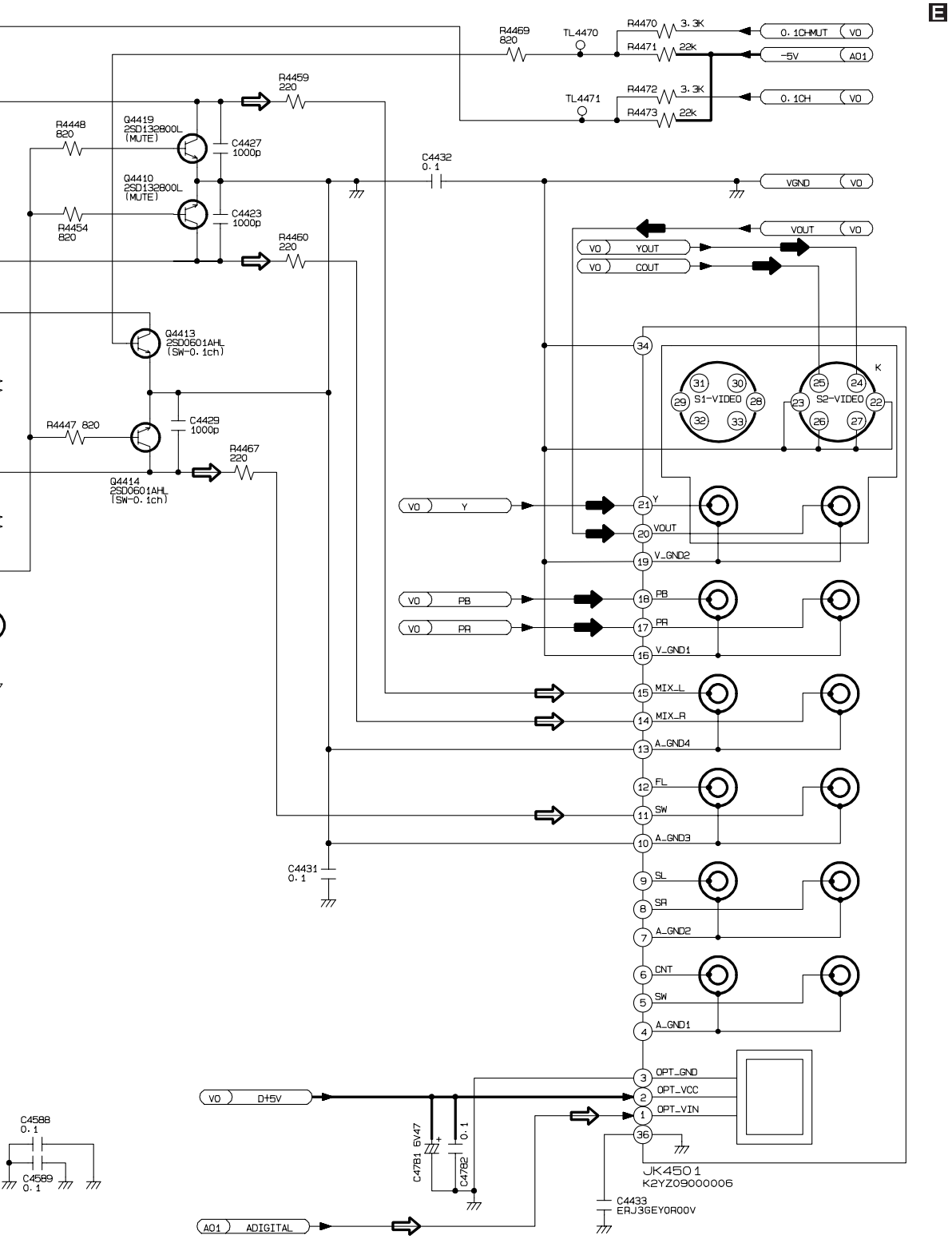
6 7 8 9 10 11

15.6. AUDIO OUT 2 SECTION (TERMINAL P.C.B. (3/3)) SCHEMATIC DIAGRAM



PO SECTION:Page A OP SECTION:Page B VO SECTION:Page C
AO1 SECTION:Page D AO2 SECTION:Page E NODC SECTION:Page F
AVDEC SECTION:Page G PROG SECTION:Page H VD SECTION:Page I
AD SECTION:Page J WMA SECTION:Page K CPU SECTION:Page L

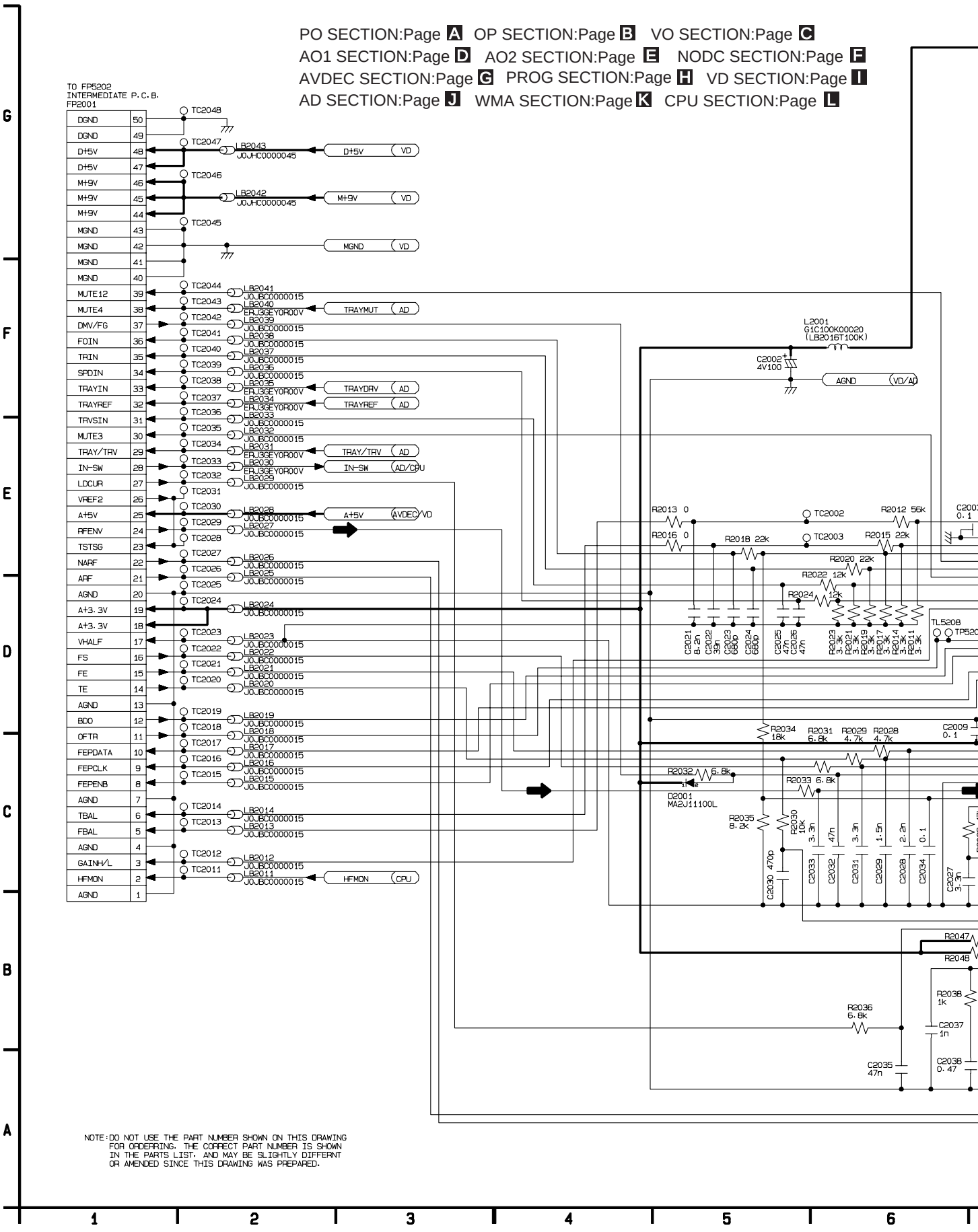
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERARING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.



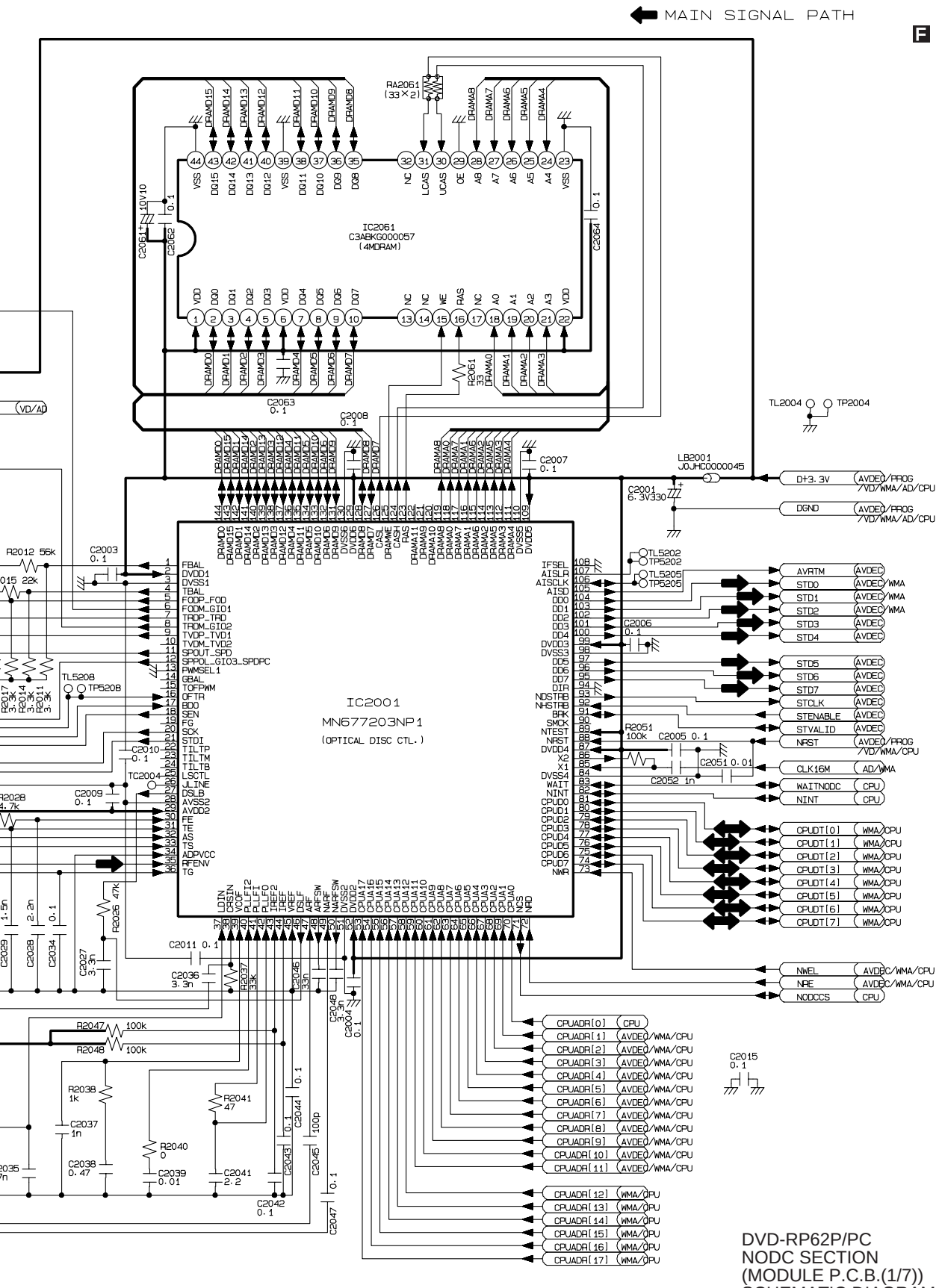
DVD-RP62P/PC
AUDIO OUT 2 SECTION
(TERMINAL P.C.B.(3/3))
SCHEMATIC DIAGRAM

7 8 9 10 11

15.7. NODC SECTION (MODULE P.C.B. (1/7)) SCHEMATIC DIAGRAM



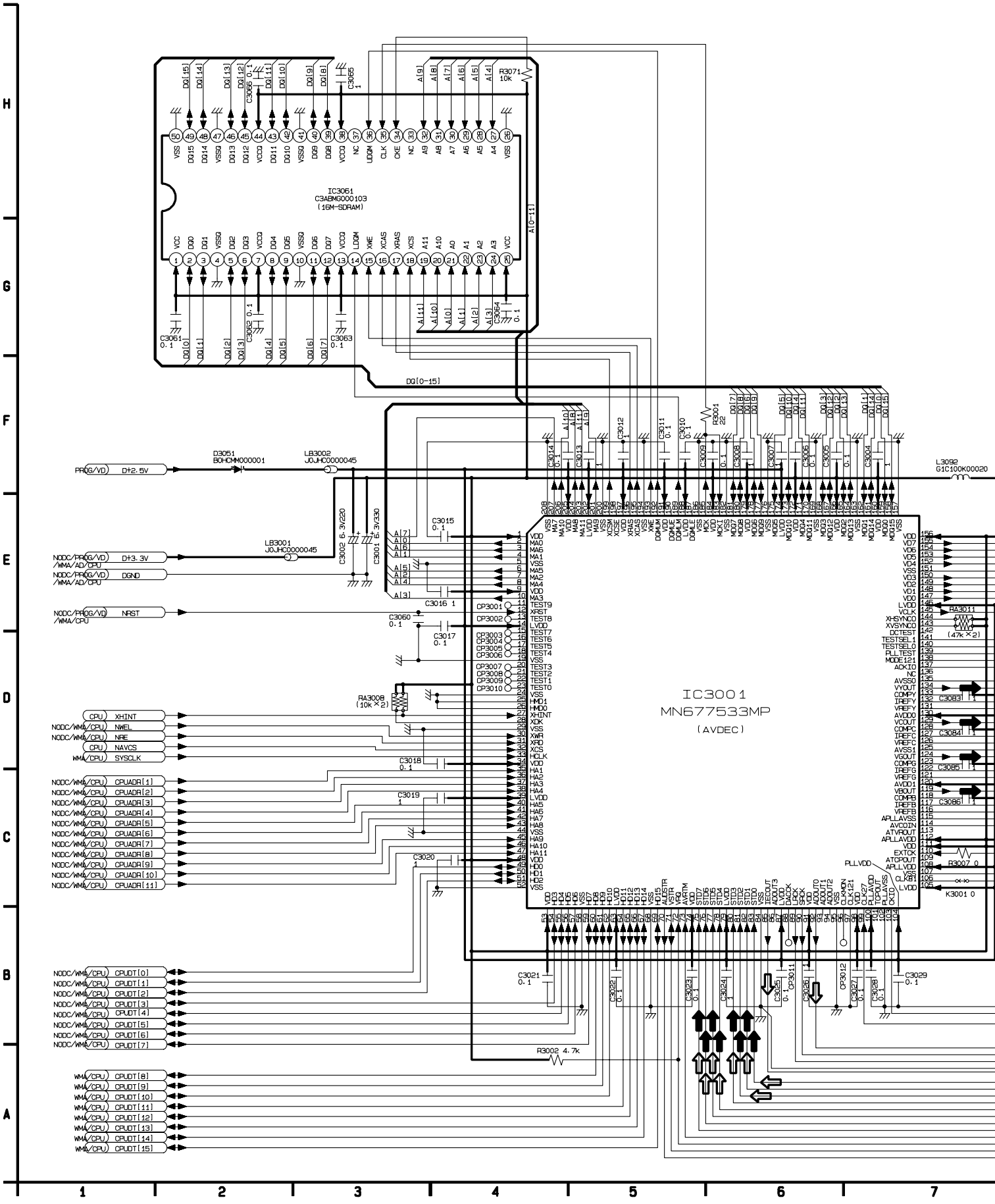
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.



DVD-RP62P/PC
NODC SECTION
(MODULE P.C.B.(1/7))
SCHEMATIC DIAGRAM

6 7 8 9 10 11

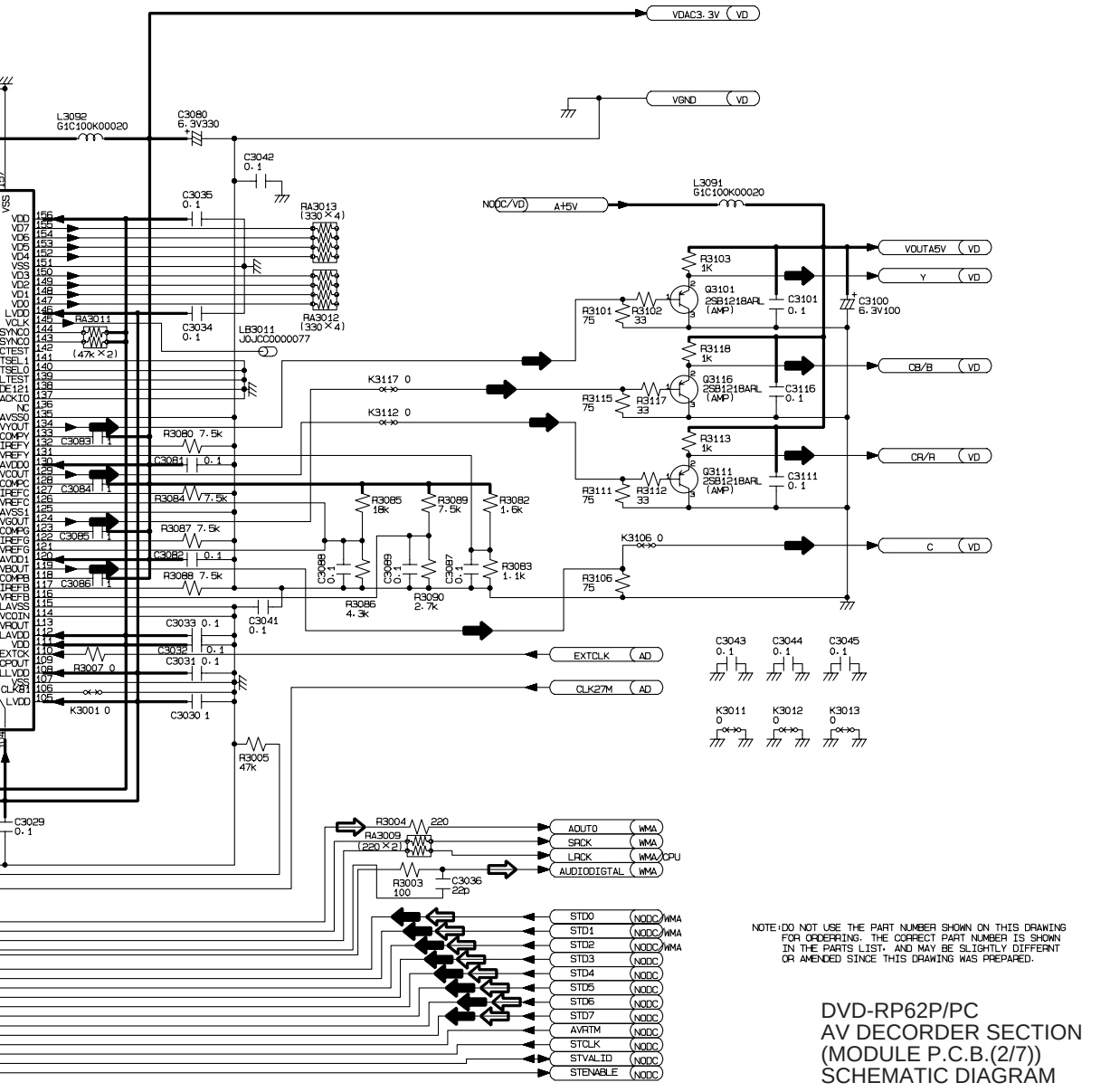
15.8. AV DECORDER SECTION (MODULE P.C.B. (2/7)) SCHEMATIC DIAGRAM



G

VIDEO SIGNAL PATH
AUDIO SIGNAL PATH

PO SECTION:Page A OP SECTION:Page B VO SECTION:Page C
AO1 SECTION:Page D AO2 SECTION:Page E NODC SECTION:Page F
AVDEC SECTION:Page G PROG SECTION:Page H VD SECTION:Page I
AD SECTION:Page J WMA SECTION:Page K CPU SECTION:Page L



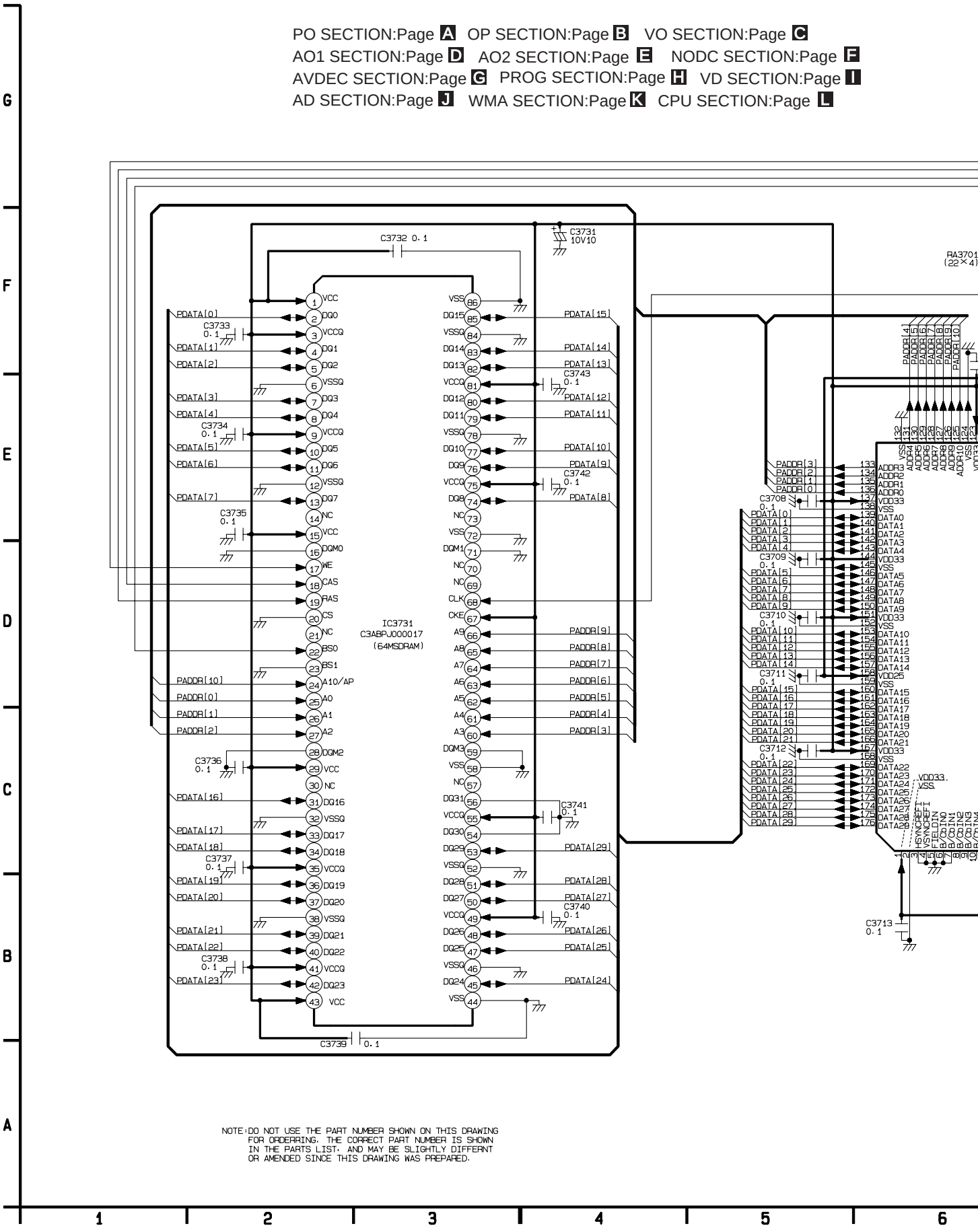
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
AV DECORDER SECTION
(MODULE P.C.B.(2/7))
SCHEMATIC DIAGRAM

7 8 9 10 11 12

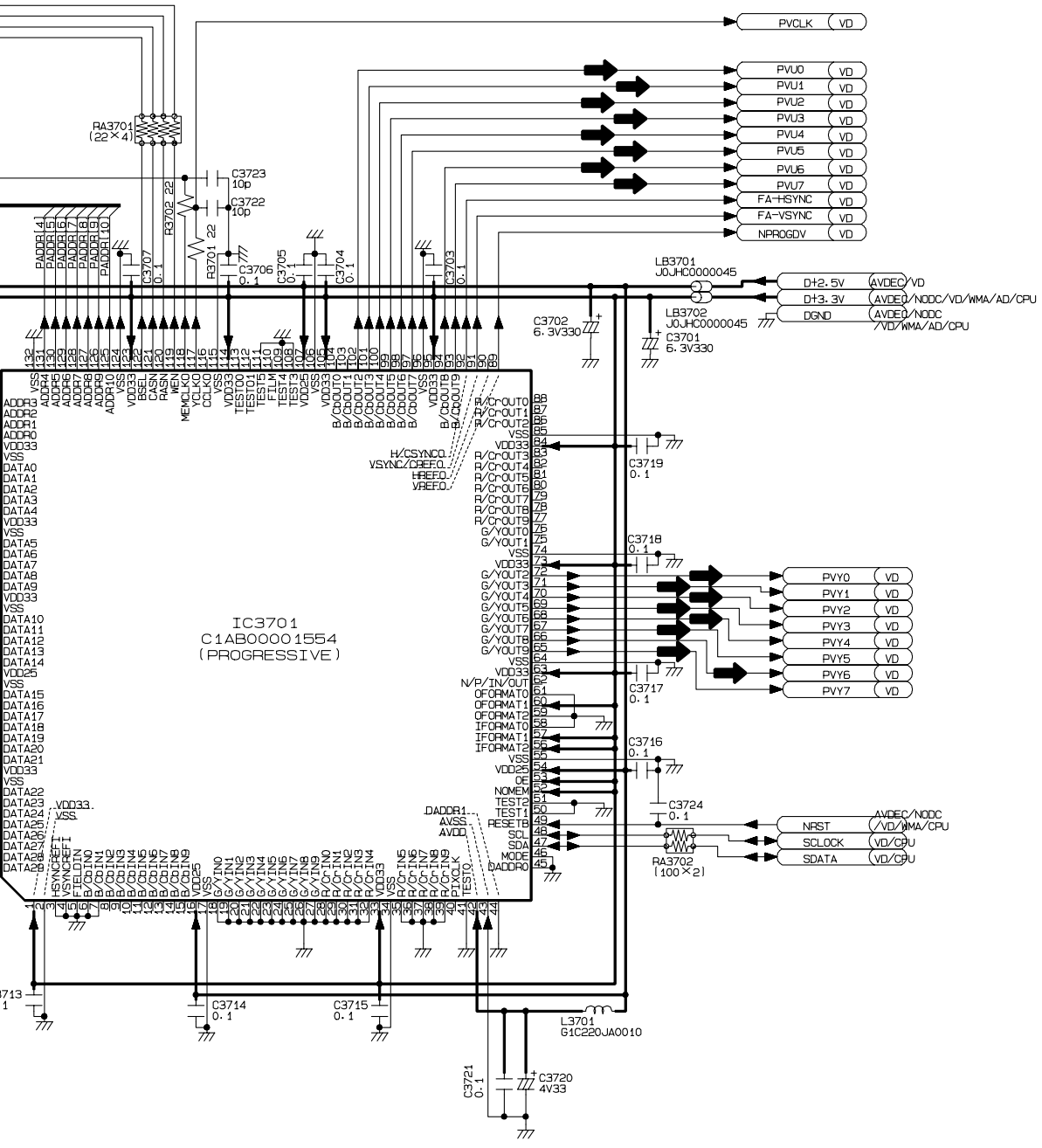
15.9. PROGRESSIVE SECTION (MODULE P.C.B. (3/7)) SCHEMATIC DIAGRAM

PO SECTION:Page A OP SECTION:Page B VO SECTION:Page C
AO1 SECTION:Page D AO2 SECTION:Page E NODC SECTION:Page F
AVDEC SECTION:Page G PROG SECTION:Page H VD SECTION:Page I
AD SECTION:Page J WMA SECTION:Page K CPU SECTION:Page L



H

VIDEO SIGNAL PATH

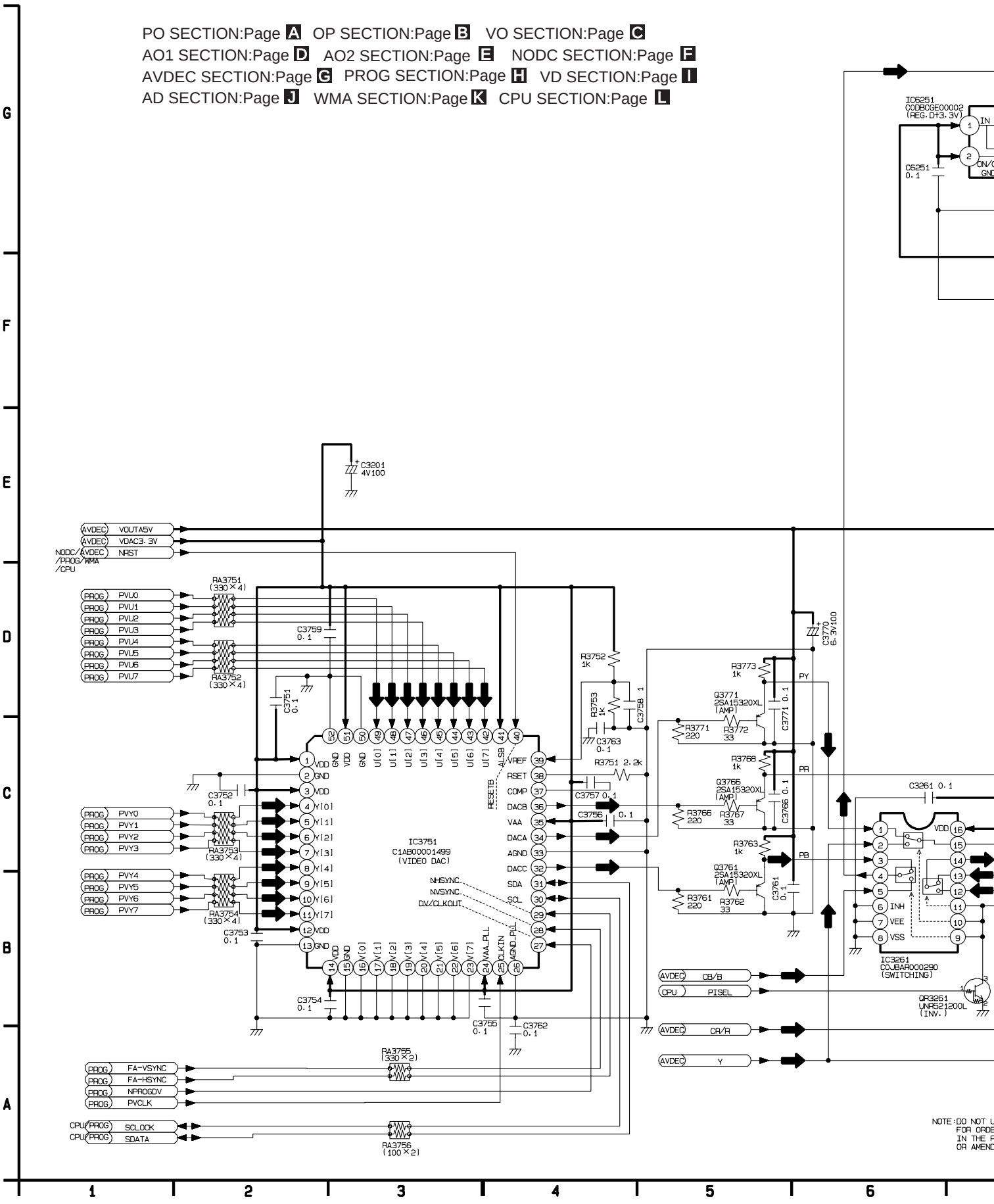


DVD-RP62P/PC
PROGRESSIVE SECTION
(MODULE P.C.B.(3/7))
SCHEMATIC DIAGRAM

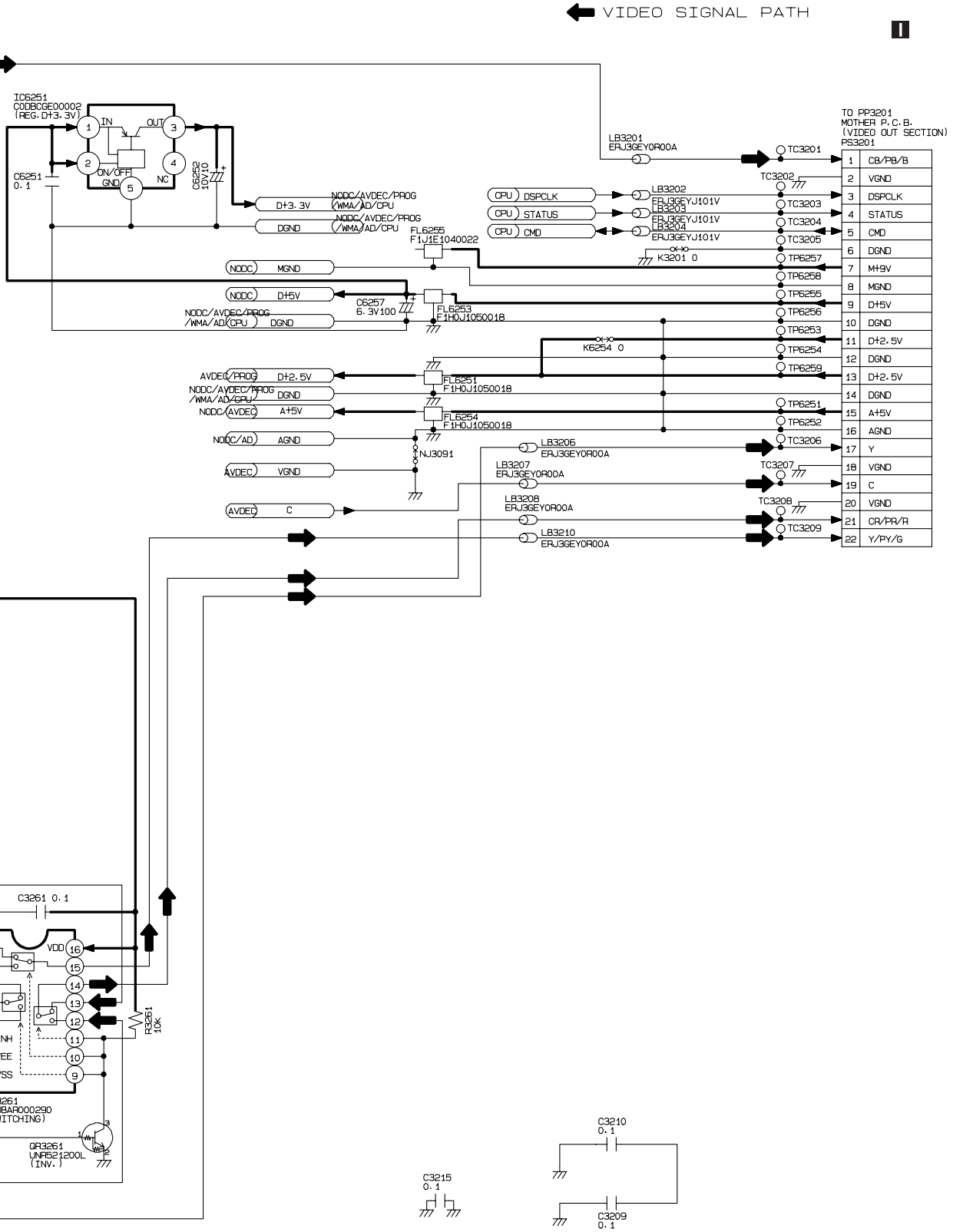
6 7 8 9 10

15.10. VIDEO D/A CONVERTER SECTION (MODULE P.C.B. (4/7)) SCHEMATIC DIAGRA

PO SECTION:Page A OP SECTION:Page B VO SECTION:Page C
AO1 SECTION:Page D AO2 SECTION:Page E NODC SECTION:Page F
AVDEC SECTION:Page G PROG SECTION:Page H VD SECTION:Page I
AD SECTION:Page J WMA SECTION:Page K CPU SECTION:Page L



C DIAGRAM

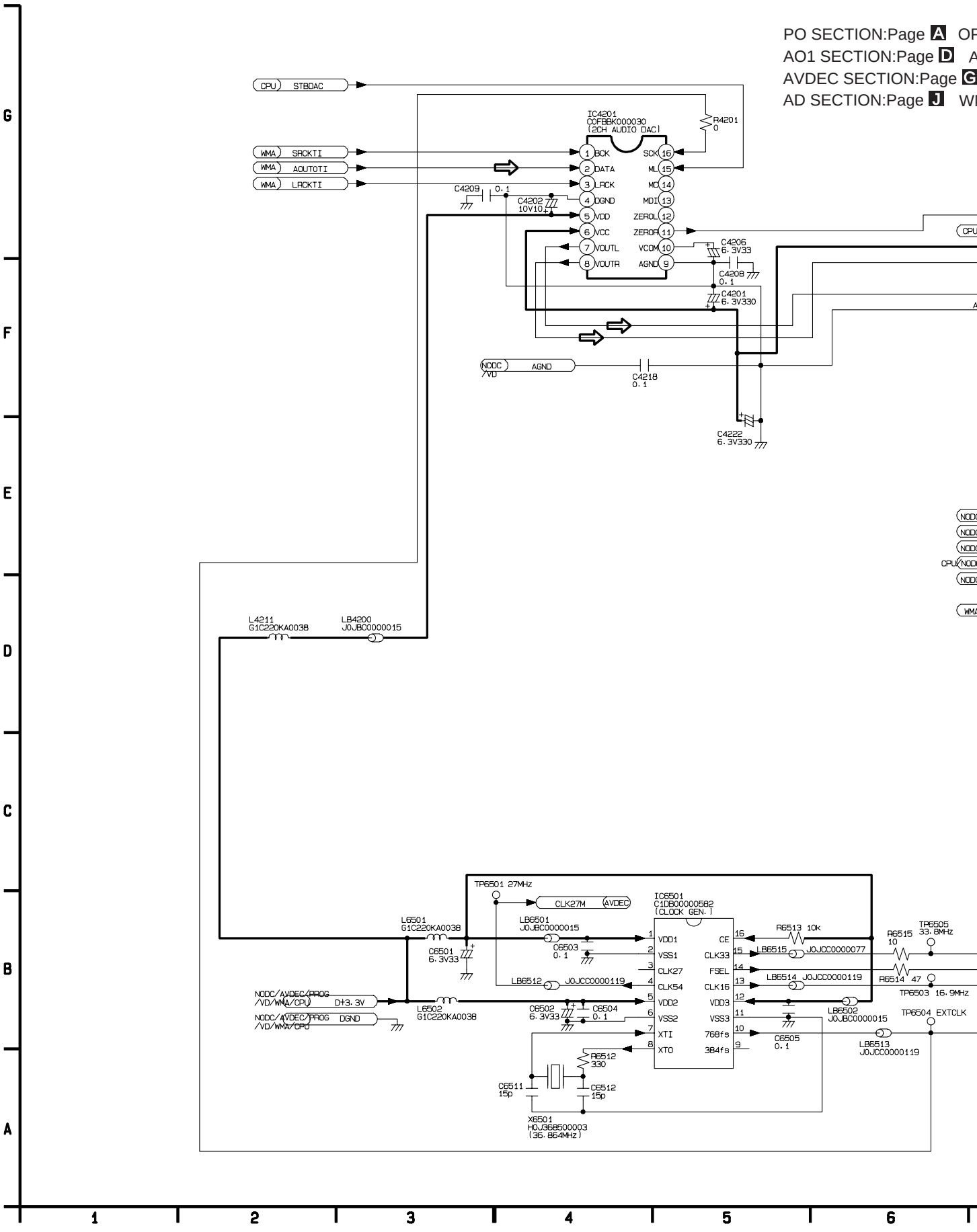


NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
VIDEO D/A CONVERTER SECTION
(MODULE P.C.B.(4/7))
SCHEMATIC DIAGRAM

7 8 9 10 11

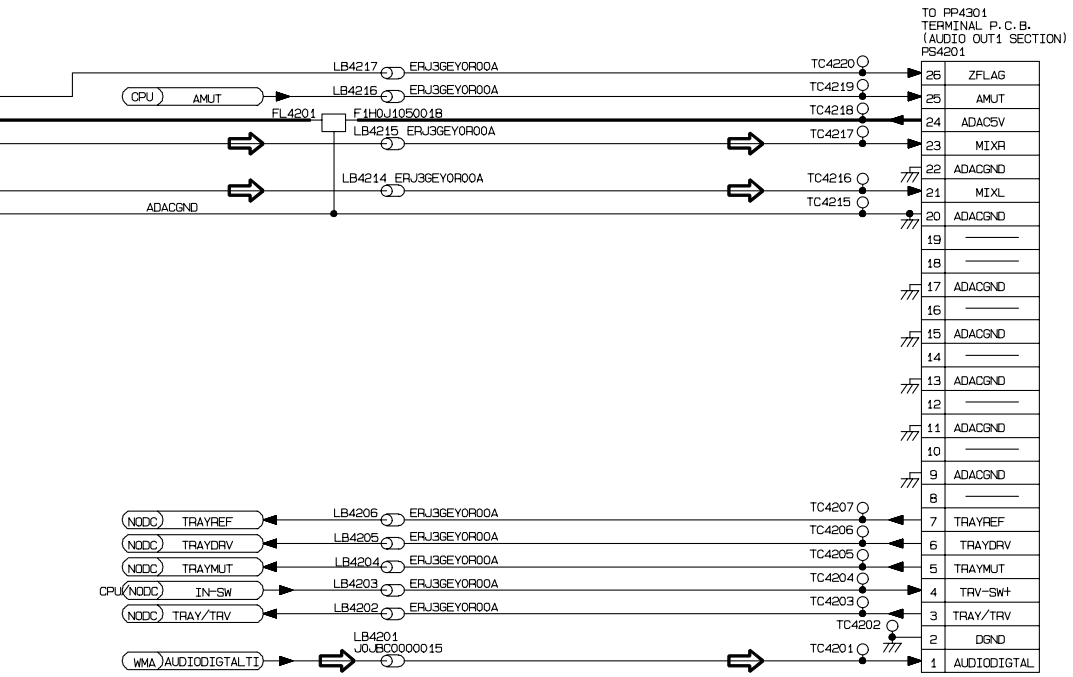
15.11. AUDIO D/A CONVERTER SECTION (MODULE P.C.B. (5/7)) SCHEMATIC DIA

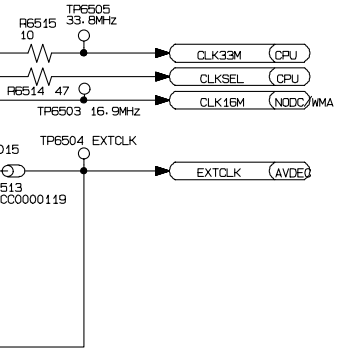


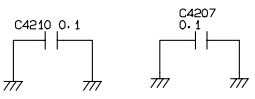
ATIC DIAGRAM

N:Page A OP SECTION:Page B VO SECTION:Page C
ON:Page D AO2 SECTION:Page E NODC SECTION:Page F
CTION:Page G PROG SECTION:Page H VD SECTION:Page I
N:Page J WMA SECTION:Page K CPU SECTION:Page L

⇦ AUDIO SIGNAL PATH J





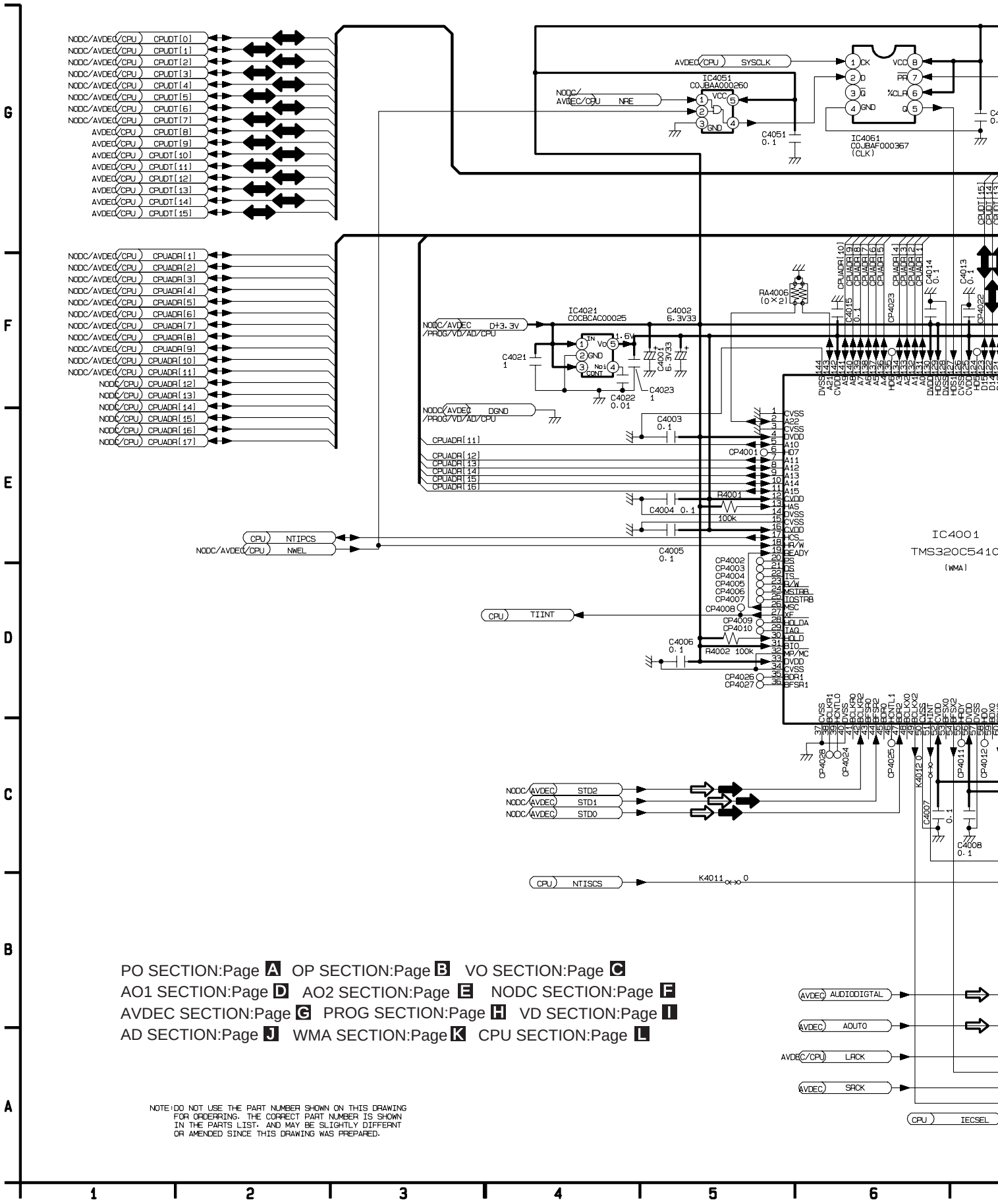


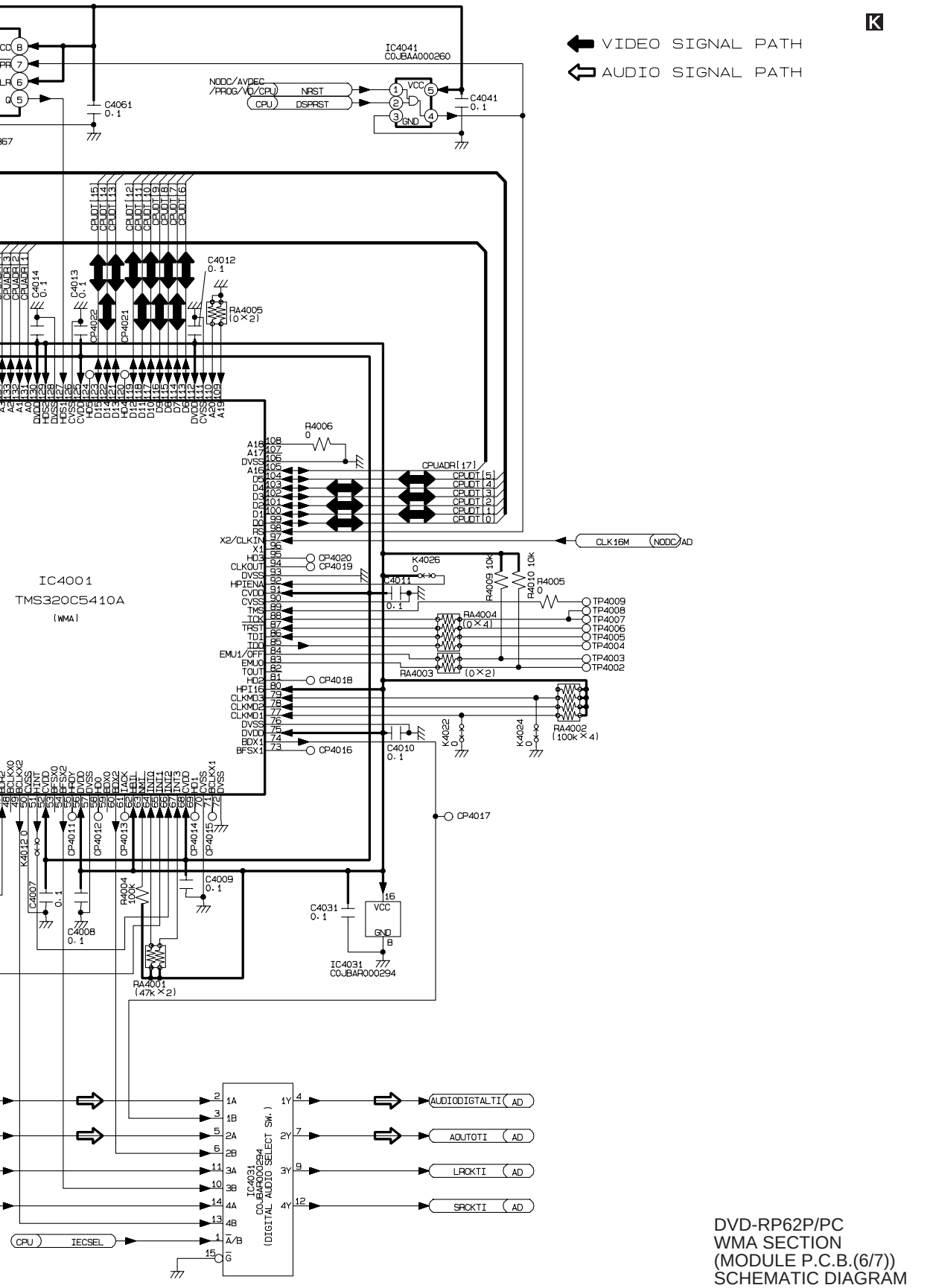
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
AUDIO D/A CONVERTER SECTION
(MODULE P.C.B.(5/7))
SCHEMATIC DIAGRAM

6 7 8 9 10 11

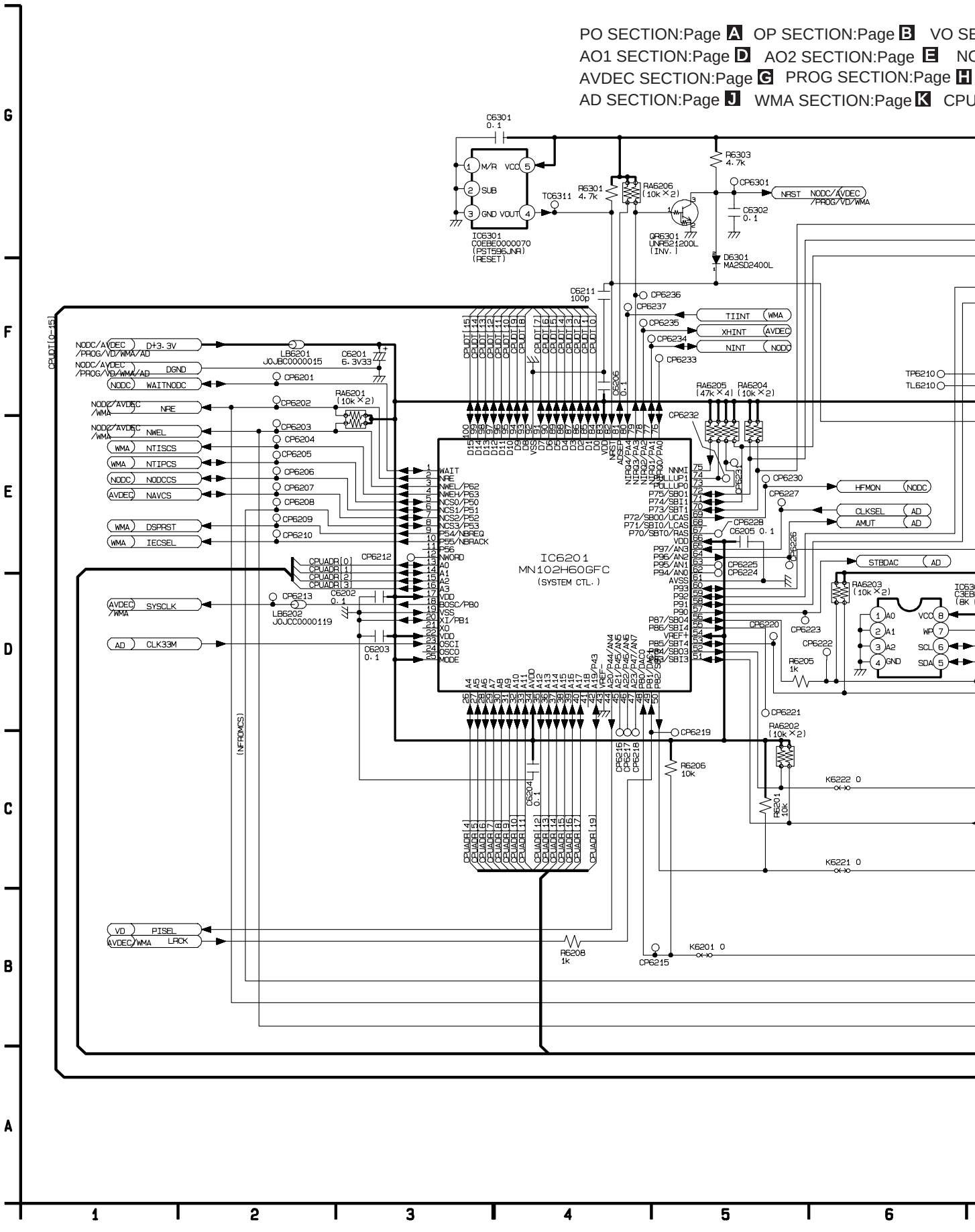
15.12. WMA SECTION (MODULE P.C.B. (6/7)) SCHEMATIC DIAGRAM





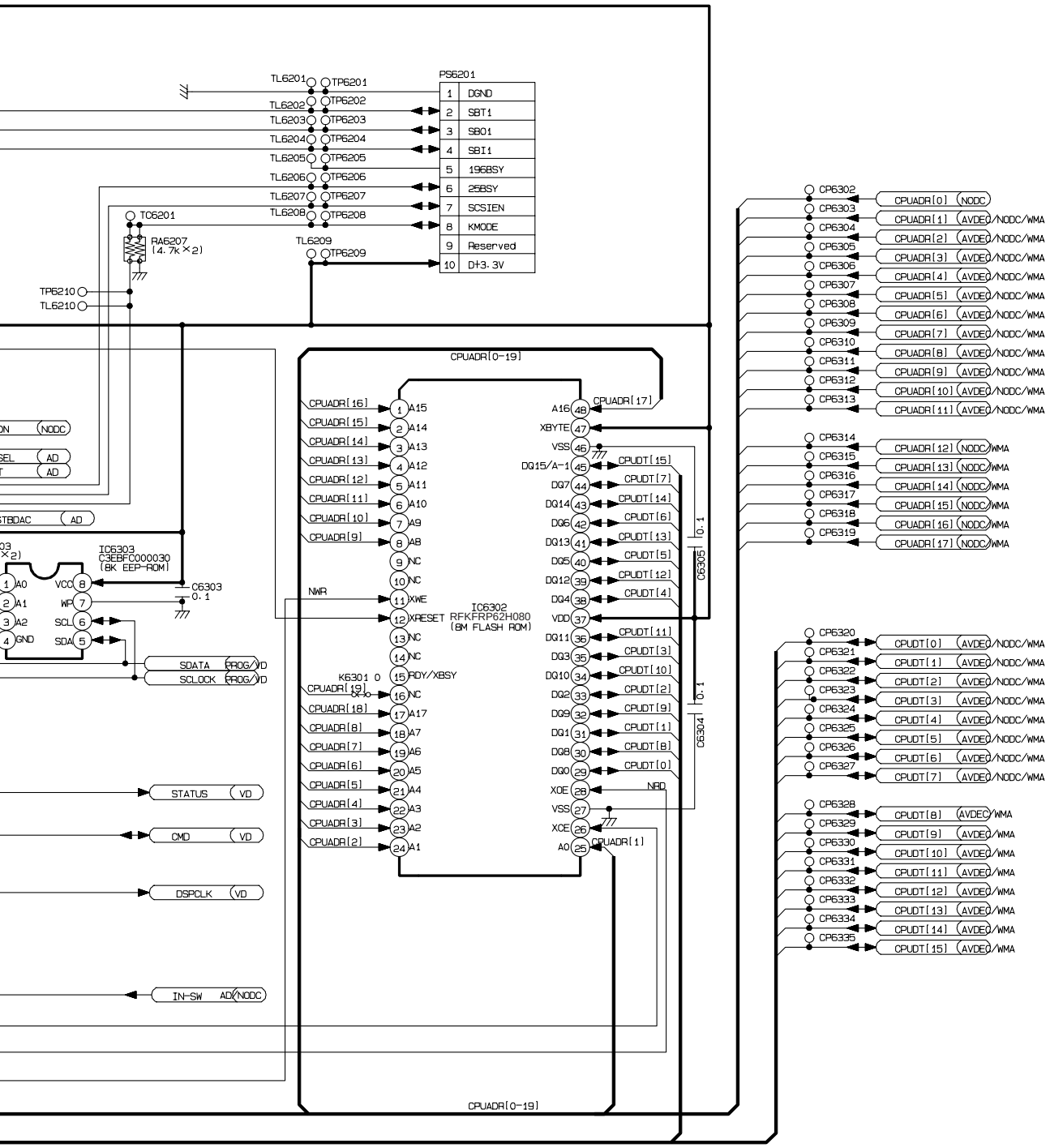
DVD-RP62P/PC
WMA SECTION
(MODULE P.C.B.(6/7))
SCHEMATIC DIAGRAM

15.13. CPU SECTION (MODULE P.C.B. (7/7)) SCHEMATIC DIAGRAM



age B VO SECTION:Page C
:Page E NODC SECTION:Page F
TION:Page H VD SECTION:Page I
Page K CPU SECTION:Page L

L

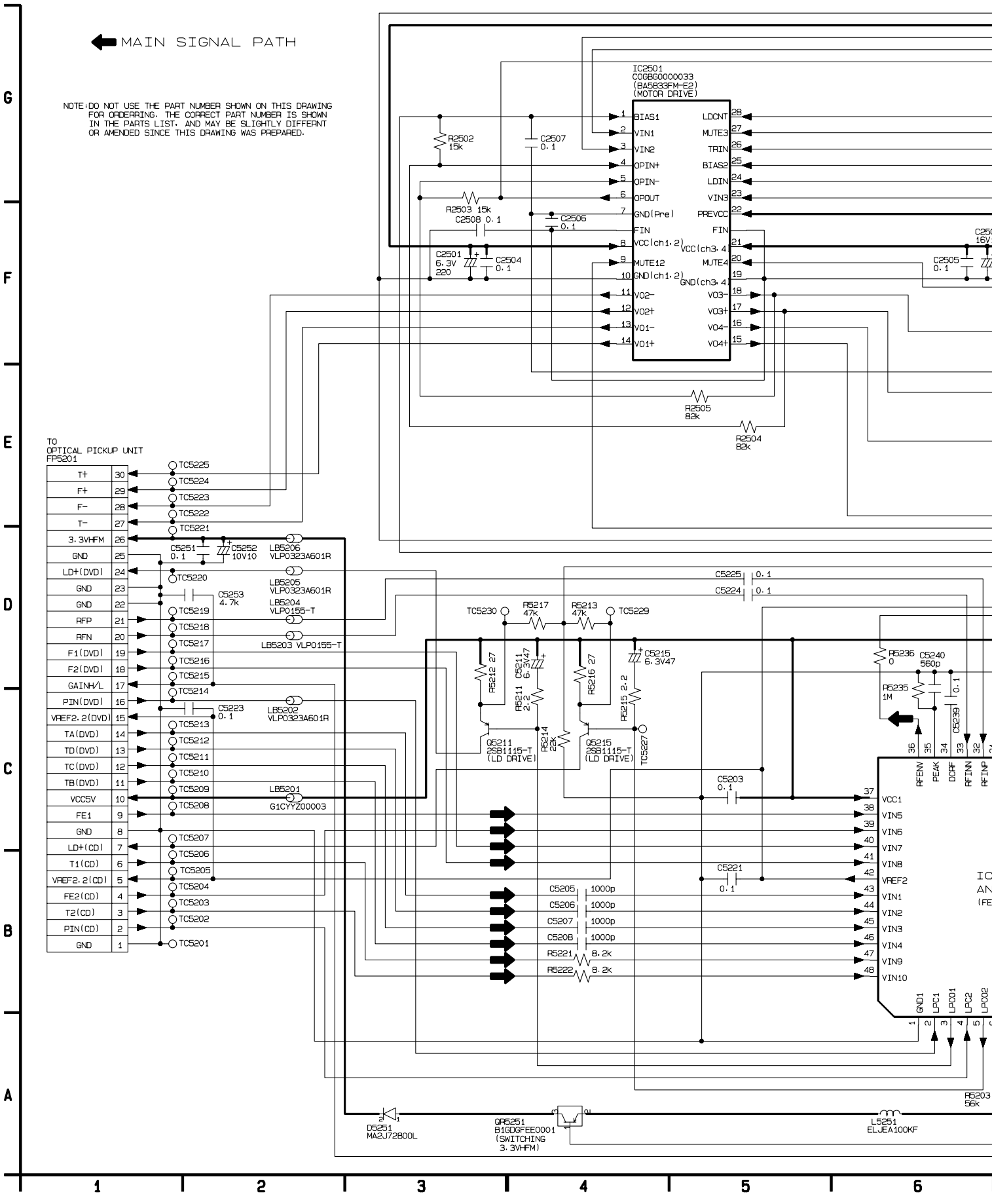


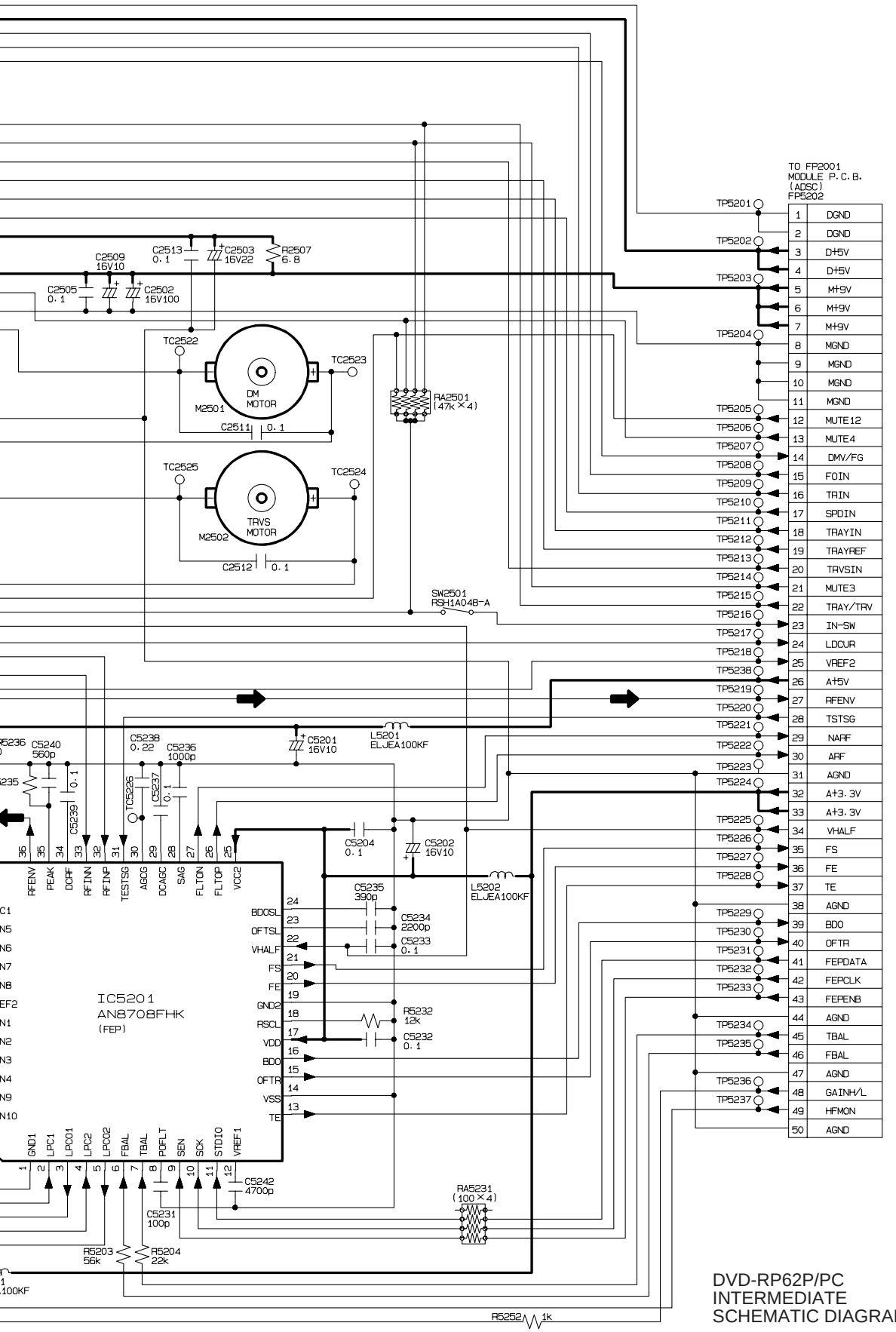
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
CPU SECTION
(MODULE P.C.B.(7/7))
SCHEMATIC DIAGRAM

6 7 8 9 10 11

15.14. INTERMEDIATE SCHEMATIC DIAGRAM

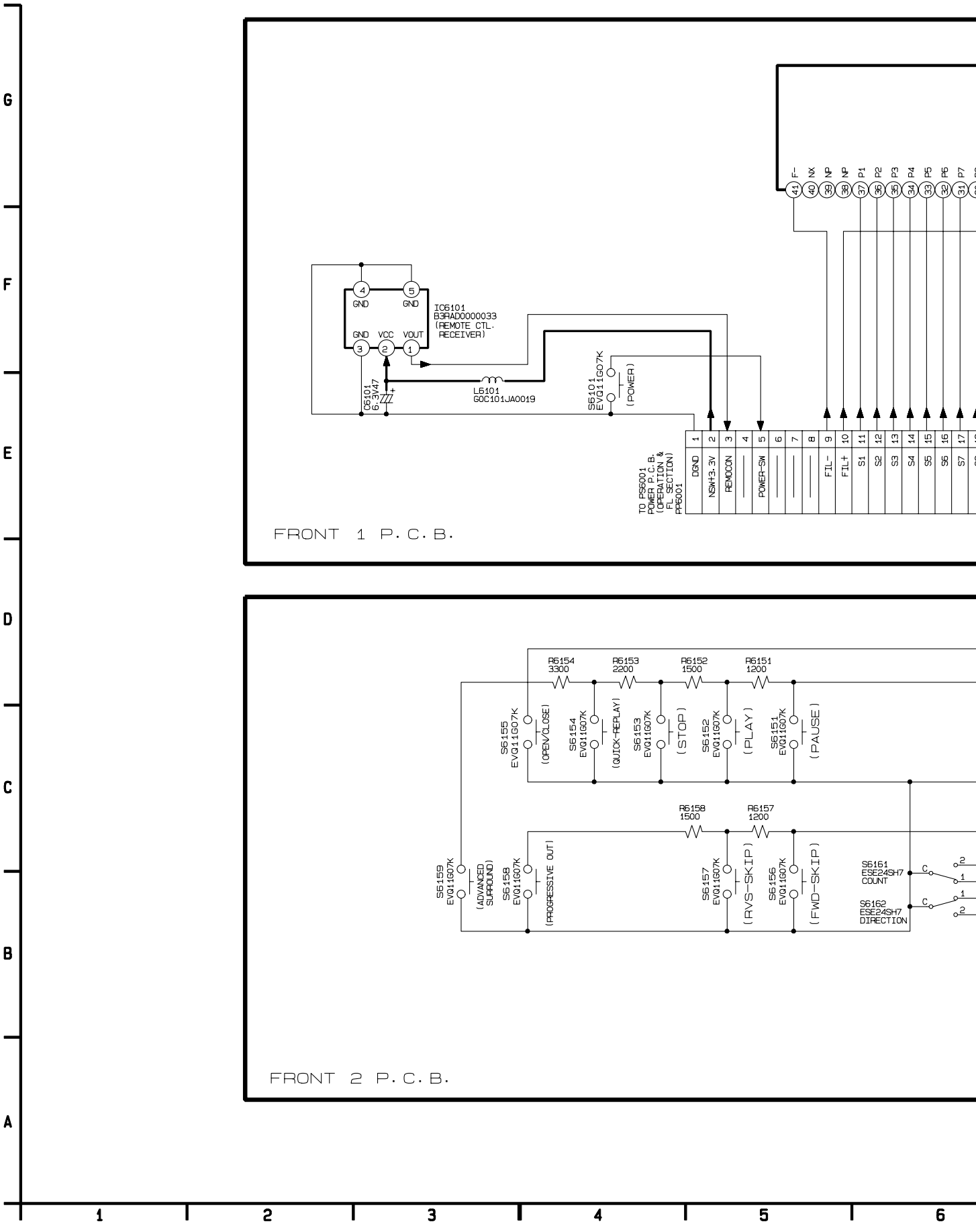


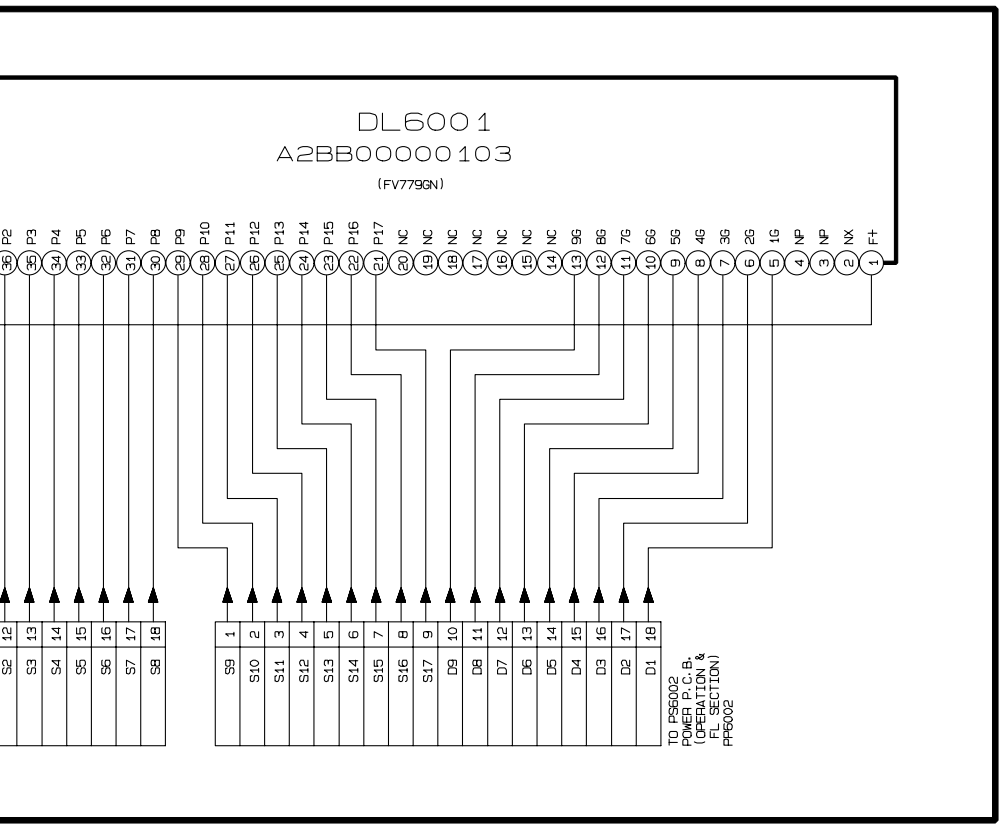


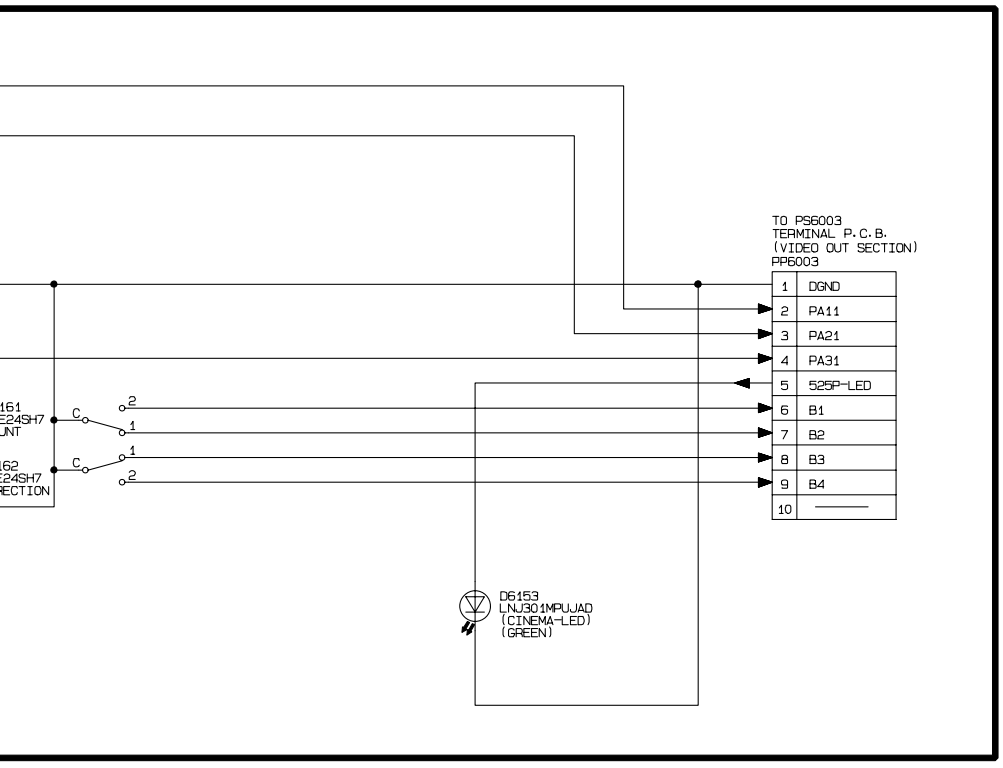
DVD-RP62P/PC
INTERMEDIATE
SCHEMATIC DIAGRAM

6 7 8 9 10

15.15. FRONT 1 AND FRONT 2 SCHEMATIC DIAGRAM



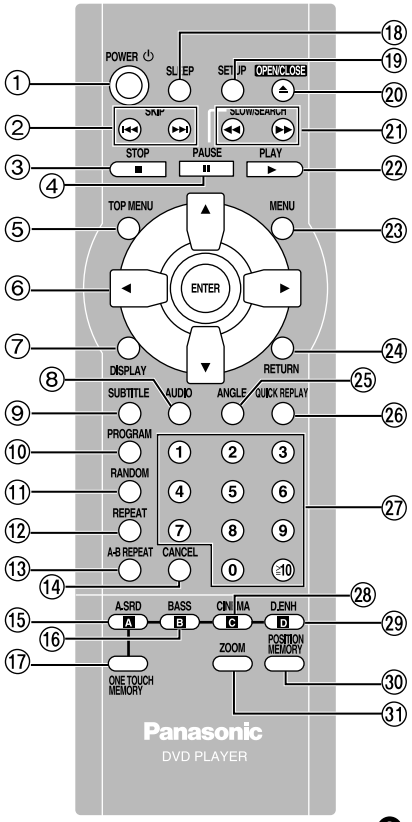


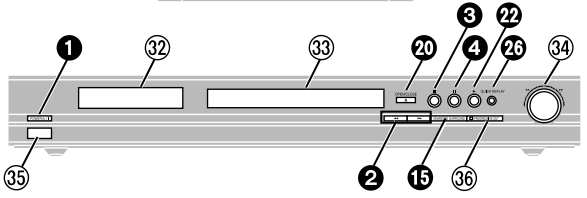


NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERANT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DVD-RP62P/PC
FRONT 1/FRONT 2
SCHEMATIC DIAGRAM

6 7 8 9 10





Buttons such as ❶ function the same as the buttons on the remote control.

① **Standby/on switch (POWER ⏻)**
Press to switch the unit from on to standby mode or vice versa.
In standby mode, the unit is still consuming a small amount of power.

② **Skip buttons (⏮, ⏭ SKIP)**

③ **Stop button (■ STOP)**

④ **Pause button (❚❚ PAUSE)**

⑤ **Top menu button (TOP MENU)**

⑥ **Cursor buttons (▲, ▼, ◄, ►)/Enter button (ENTER)**

⑦ **Display button (DISPLAY)**

⑧ **Audio button (AUDIO)**

⑨ **Subtitle button (SUBTITLE)**

⑩ **Program button (PROGRAM)**

⑪ **Random play button (RANDOM)**

⑫ **Repeat button (REPEAT)**

⑬ **A-B repeat button (A-B REPEAT)**

⑭ **Cancel button (CANCEL)**

⑮ **Advanced Surround button (A A.SRD)**

⑯ **Bass plus button (B BASS)**

⑰ **One touch cinema memory button (ONE TOUCH MEMORY)**

⑱ **Sleep button (SLEEP)**

⑲ **Setup button (SETUP)**

⑳ **Open/close button (⏏ OPEN/CLOSE)**

㉑ **Slow/Search buttons (◄◄, ►► SLOW/SEARCH)**

㉒ **Play button (► PLAY)**

㉓ **Menu button (MENU)**

㉔ **Return button (RETURN)**

㉕ **Angle button (ANGLE)**

㉖ **Quick replay button (QUICK REPLAY)**

㉗ **Numbered buttons (1–9, 0, ≧10)**

㉘ **Cinema button (C CINEMA)**

㉙ **Dialogue Enhancer button (D D.ENH)**

㉚ **Position memory button (POSITION MEMORY)**

㉛ **4:3 TV ZOOM button (ZOOM)**

㉜ **Display**

㉝ **Disc tray**

㉞ **Shuttle dial (◄◄, ►►)**

㉟ **Remote control signal sensor**

㊱ **Progressive out button/indicator (PROGRESSIVE OUT)**

Ref No.	IC1101				IC1125						IC1151									
MODE	K	R	A		1	2	3	4	5		1	2	3	4	5					
PLAY	2.5	0	3.1		3.7	3.2	2.7	1.2	0		9.7	3.2	9.0	-	0					
STOP	2.5	0	3.0		3.7	3.1	2.7	1.2	0		9.7	3.1	9.0	-	0					
Ref No.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	3.3	3.3	3.3	1.0	2.8	3.0	3.2	3.3	1.5	1.6	0	0	3.3	0	0	3.3	3.3	3.3	3.3	3.3
STOP	3.2	3.2	3.2	1.0	2.7	2.9	3.2	3.2	1.5	1.6	0	0	3.2	0	0	3.2	3.2	3.2	3.2	3.2
Ref No.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY	0	1.0	2.0	3.3	0	3.3	1.6	1.6	3.2	3.3	3.2	3.3	3.3	3.3	3.3	3.3	3.3	3.3	0	3.2
STOP	0	1.0	1.9	3.2	0	3.2	1.6	1.6	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.3	0	3.2
Ref No.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
PLAY	0	3.2	3.3	3.3	3.3	3.3	3.3	3.2	3.2	2.9	-	-	-	-	27.7	-27.6	-27.7	-27.7	-27.6	-27.7
STOP	0	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	2.9	-	-	-	-	27.3	-27.3	-27.3	-27.3	-27.3	-27.3
Ref No.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
PLAY	-27.8	-27.8	-28.3	-23.9	-24.0	-17.2	-10.4	-7.1	-13.7	-27.3	-27.3	-23.9	-24.2	24.1	-24.2	-27.5	-27.5	-7.3	-17.5	-13.9
STOP	-27.5	-27.4	-27.9	-26.9	-30.2	-23.6	-16.9	-20.3	-20.2	-26.9	-23.5	-26.7	-20.7	-23.9	-27.1	-23.8	-30.4	-17.2	-17.2	-13.7
Ref No.	IC6001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
PLAY	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	-	-	3.2	-	-	-	-	3.1	-4.7	-31.0
STOP	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	-	-	3.2	-	-	-	-	3.1	-4.7	-30.5
Ref No.	IC6011																			
MODE	1	2	3	4																
PLAY	-	0	3.3	3.3																
STOP	-	0	3.3	3.3																
Ref No.	Q1021				Q1051					Q1052					Q1115					
MODE	1	2	3		1	2	3	4		1	2	3			1	2	3	4	5	6
PLAY	0	51.0	-0.3		5.2	4.1	0.7	12.4		0	-0.2	0			5.1	5.1	0	5.1	5.1	5.1
STOP	0	165.7	-0.2		5.2	4.1	0.8	12.1		0	-0.2	0			5.1	5.1	0	5.1	5.1	5.1
Ref No.	Q6091				Q6095				QR1115				QR6056							
MODE	E	C	B		E	C	B		1	2	3		E	C	B					
PLAY	3.3	5.1	4.0		-24.5	-24.5	-23.8		0	0	3.2		3.3	0	3.2					
STOP	3.3	5.1	3.9		-24.1	-24.1	-23.4		0	0	3.1		3.3	0	3.2					

Ref No.	IC3501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	2.1	5.0	2.8	0	2.6	5.0	0	2.5	0	1.9	5.0	2.8	0	2.8	5.0	2.2	2.3	-	2.3	0
STOP	2.1	5.0	2.8	2.4	2.4	5.0	0	2.4	0	1.8	5.0	2.8	0	2.8	5.0	2.2	2.3	-	2.3	0

Ref No.	IC3501												IC3581							
MODE	21	22	23	24	25	26	27	28	29	30	31	32			1	2	3			
PLAY	2.1	2.1	0	2.0	2.1	0	1.9	0	2.0	2.0	0	2.3			8.9	0	5.1			
STOP	1.7	1.7	0	1.7	1.7	0	1.8	0	1.7	1.6	0	2.3			8.9	0	5.1			

Ref No.	IC4301									IC4403										
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8			
PLAY	0	0	0	-10.4	0	0	0	10.2		0	0	0	-10.4	0	0	0	10.2			
STOP	0	0	0	-10.3	0	0	0	10.1		0	0	0	-10.3	0	0	0	10.1			

Ref No.	Q3501				Q3502				Q4302				Q4410				Q4413			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	1.7	0	1.0		1.1	5.0	1.7		0	2.8	0		0	0	-4.7		0	0	-4.7	
STOP	1.7	0	1.1		1.1	5.0	1.7		0	0	0		0	0	0.7		0	0	-4.7	

Ref No.	Q4414				Q4419				Q4420				QR3501				QR3521			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY	0	0	-4.7		0	0	-4.7		0	0	0.7		0	0	3.2		0	0	3.2	
STOP	0	0	0.7		0	0	0.7		0	0	0.7		0	0	3.2		0	0	3.2	

Ref No.	QR4301				QR4302				QR4304											
MODE	E	C	B		E	C	B		E	C	B									
PLAY	0	2.8	0		0	0.1	2.8		0.1	-4.7	0									
STOP	0	0	3.2		0	1.5	0		1.5	1.3	0									

Ref No.	IC2001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.6	3.3	0	1.6	1.6	3.3	1.6	3.3	1.6	-	1.6	3.2	0	-	-	0	0	3.3	0.4	3.3
PLAY	0.9	3.3	0	1.6	1.6	3.3	1.7	3.3	1.6	-	2.2	0	0	-	-	0	0	3.3	0.4	3.3
Ref No.	IC2001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	-	-	-	-	1.6	1.5	0	3.3	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.4	1.6	1.6	1.3
PLAY	0	-	-	-	-	2.1	1.3	0	3.3	1.6	1.6	1.9	2.1	1.6	0.9	1.6	2.1	1.6	1.6	1.3
Ref No.	IC2001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	1.3	1.3	3.2	1.0	1.6	1.6	1.6	1.6	1.6	1.6	0	3.3	0.4	1.3	1.0	1.0	0.7	3.3	0	1.3
PLAY	1.3	1.3	3.2	1.0	1.6	1.7	1.6	1.7	1.6	1.6	0	3.3	1.4	1.7	0.9	0.9	1.0	1.4	0.7	1.3
Ref No.	IC2001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0.7	0.9	1.5	3.0	1.5	2.5	1.8	2.6	2.6	2.3	3.3	2.9	3.3	0.7	3.3	3.3	0.6	3.3	0.5	0.8
PLAY	1.2	1.1	1.5	2.1	1.8	2.1	1.7	2.1	2.3	1.3	3.0	2.4	3.2	1.7	1.8	1.4	1.8	1.6	1.9	1.6
Ref No.	IC2001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	1.9	3.3	0	0	1.6	1.5	3.3	3.3	3.3	1.6	0	3.3	1.5	0	0	0	0	0	3.3	0
PLAY	1.9	3.2	0	0	1.6	1.6	3.3	3.3	3.3	1.6	0.3	1.1	1.5	0	2.8	2.8	2.8	0	3.3	1.6
Ref No.	IC2001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	0	0	0	0	3.3	3.3	0	0	3.3	0	3.3	3.3	0	3.3	0	0	0	0	0	0
PLAY	1.7	1.7	1.8	1.8	3.3	3.3	0	0	3.3	0	2.3	2.1	1.0	2.3	0.9	0.9	1.0	1.3	1.1	0
Ref No.	IC2001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
STOP	0	0	3.3	3.3	0	3.3	0	0	3.3	0	0	0	0	0	0	0	0	0	0	0
PLAY	0	0	2.6	3.1	0.5	3.0	0.6	0.6	3.3	0	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.8
Ref No.	IC2001																			
MODE	141	142	143	144																
STOP	0	0	0	0																
PLAY	0.8	0.8	0.8	0.8																
Ref No.	IC2061																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	3.3	0	0	0	0	3.3	0	0	0	0	-	-	-	-	0	3.3	-	0.1	0	3.2
PLAY	3.3	0.8	0.8	0.8	0.8	3.3	0.8	0	0.7	0.8	-	-	-	-	0	2.9	-	1.3	1.3	2.3
Ref No.	IC2061																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	3.2	3.3	0	3.3	0	0	0	0	0	3.3	3.3	-	-	-	0	0	0	0	0	-
PLAY	2.5	3.3	0	2.5	1.0	1.0	1.1	0	0	3.0	3.0	-	-	-	0.8	0.8	0.8	0.8	0	-
Ref No.	IC2061																			
MODE	41	42	43	44																
STOP	0	0	0	0																
PLAY	0.8	0.8	0.8	0																
Ref No.	IC3001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	3.3	0	1.1	0	0	1.1	0	1.0	3.3	1.1	3.3	3.3	3.3	1.8	0	0	0	0	0	0
PLAY	3.3	0.1	1.5	0.1	0	1.5	0.1	1.2	3.3	1.5	3.3	3.2	3.3	1.8	0	0	0	0	0	0
Ref No.	IC3001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	0	0	0	3.3	3.3	0	3.3	0	3.3	1.4	3.3	0	0	0	0	1.8	0
PLAY	0	0	0	0	0	0	3.2	3.3	0	3.2	0	3.3	1.4	3.3	1.1	0.7	1.7	0.6	1.8	0.5
Ref No.	IC3001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	0	0	0	3.3	0	3.3	3.3	0	0	0	3.3	0	3.3	0	3.3	0	0	0.5
PLAY	0.7	0.8	0.3	0	1.2	1.3	0.8	3.3	1.8	1.6	1.9	0	3.3	1.6	1.8	1.4	1.8	0	1.7	1.7
Ref No.	IC3001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0.5	0.5	1.8	0.5	0.5	0.5	0.5	0	0.5	0	1.5	3.3	3.3	3.3	3.3	0	3.3	0	1.8	0
PLAY	1.4	1.5	1.8	1.3	2.3	1.3	1.5	0	2.2	0.3	1.5	0.8	3.3	3.3	1.9	1.7	1.7	1.7	1.8	1.6
Ref No.	IC3001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	3.3	0	3.3	0	1.6	0	1.8	1.5	1.6	1.6	3.3	0	0	0	0	0	0	3.3	1.5	3.3
PLAY	1.5	1.8	3.3	0	1.6	1.2	1.8	1.5	1.6	1.6	3.3	1.2	0	0	0	0	0	3.3	1.5	3.3
Ref No.	IC3001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	0.2	0	0	1.8	1.8	0	0	1.8	3.2	1.5	3.3	3.3	1.0	0	0	0.9	0.9	2.2	0.5	3.2
PLAY	0.4	0	0	1.8	1.8	0	0	1.8	3.2	1.5	3.3	3.3	0.6	0	0	0.9	0.9	2.2	0.5	3.2
Ref No.	IC3001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
STOP	0.6	0.6	2.3	0.4	0	0.6	0.6	2.3	0.4	3.2	1.3	1.3	2.1	0.4	0	-	0	0	0	0
PLAY	0.6	0.6	2.3	0.4	0	0.6	0.6	2.3	0.4	3.2	1.3	1.3	2.1	0.6	0	-	0	0	0	0
Ref No.	IC3001																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
STOP	0	0	3.2	0	-0.1	0	0	0	0	0	0	0	0	0	0	0	0	3.0	3.0	3.3
PLAY	0	0	0	0	-0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ref No.	IC3001																			
MODE	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
STOP	2.8	2.9	0	2.8	2.9	3.3	3.1	2.9	0	2.9	3.1	3.3	2.9	1.8	2.9	0	2.9	2.9	3.3	3.0
PLAY	0	0	0	2.6	2.5	3.3	2.6	2.5	0	2.6	2.6	3.3	2.6	1.8	2.6	0	2.6	2.7	3.3	2.6
Ref No.	IC3001																			
MODE	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
STOP	2.9	0	1.7	3.3	1.7	0	3.3	1.8	2.8	3.3	3.3	2.8	3.2	0	3.2	3.1	3.3	3.3	3.1	0
PLAY	2.7	0	1.7	3.3	1.7	0	3.3	1.8	2.1	3.3	3.3	2.1	3.1	0	3.2	3.1	3.3	3.3	2.9	0

Ref No.	IC3001																			
MODE	201	202	203	204	205	206	207	208												
STOP	0	1.8	1.1	0	3.3	0	0.9	0												
PLAY	0	1.8	1.4	0	3.3	0	1.2	0												
Ref No.	IC3061																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	3.3	3.0	2.9	0	2.9	2.9	3.3	3.1	2.9	0	2.9	2.9	3.3	2.8	3.2	3.2	3.1	3.1	1.1	0
PLAY	3.3	2.6	2.5	0	2.6	2.7	3.3	2.6	2.9	0	3.1	2.3	3.3	2.1	3.1	3.0	3.1	2.9	1.4	0
Ref No.	IC3061																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	1.1	3.3	0	1.0	1.1	1.1	0.9	0	0	-	3.3	1.7	2.8	-	3.3	3.0	2.9
PLAY	0.1	0.1	0.1	1.5	3.3	0	1.2	1.5	1.5	1.2	0	0	-	3.3	1.7	2.0	-	3.3	3.3	2.6
Ref No.	IC3061																			
MODE	41	42	43	44	45	46	47	48	49	50										
STOP	0	2.9	2.9	3.3	3.1	2.8	0	2.8	3.0	0										
PLAY	0	2.7	2.6	3.3	2.6	2.7	0	2.8	2.8	0										
Ref No.	IC3261																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	1.1	1.0	1.2	1.1	1.1	0	0	0	0	0	0	1.0	1.2	1.0	1.0	5.1				
PLAY	1.2	1.2	1.2	1.0	1.0	0	0	0	0	0	0	1.1	1.2	1.1	1.1	5.0				
Ref No.	IC3701																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	3.3	0	0	0	0	0	0	1.3	0.6	0.7	0.7	2.0	0.3	0.3	1.3	2.5	0	0	0	0
PLAY	3.3	0	0	0	0	0	0	1.2	1.2	1.2	1.2	1.5	1.1	1.1	2.6	2.5	0	0	0	0
Ref No.	IC3701																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	0	0	0	0	0	0	0	0	0	3.3	0	0	0	0	0	0	1.7
PLAY	0	0	0	0	0	0	0	0	0	0	0	0	3.3	0	0	0	0	0	0	1.7
Ref No.	IC3701																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	2.5	0	0	0	0	3.3	3.3	3.3	0	0	3.3	3.3	2.5	0	3.3	3.3	0	0	3.3
PLAY	0	2.5	0	0	0	0	3.3	3.3	3.3	0	0	3.3	3.3	2.5	0	3.3	3.3	0	0	3.3
Ref No.	IC3701																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	3.3	3.3	0	0	0	0	3.2	0.5	0.4	0.5	0.8	3.3	0	-	-	-	-	-	-
PLAY	0	3.3	3.3	0	1.9	1.2	1.4	2.1	1.3	1.0	1.3	1.4	3.3	0	-	-	-	-	-	-
Ref No.	IC3701																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	-	-	-	3.3	0	-	-	-	3.1	-	3.2	3.0	2.7	0.6	3.3	0	0.6	0.9	0.9	0.9
PLAY	-	-	-	3.3	0	-	-	-	3.1	-	3.2	3.0	2.3	1.2	3.3	0	1.1	0.8	0.7	1.2
Ref No.	IC3701																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	0.6	1.8	0.2	0	3.3	0	2.5	0	0	0	0	0	0	3.3	0	0.7	1.7	1.7	3.1	2.5
PLAY	1.2	1.2	1.0	0.5	3.3	0	2.5	0	0	0	0	0	0	3.3	0	0.8	1.6	1.7	3.1	2.5
Ref No.	IC3701																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
STOP	2.5	1.4	3.3	0	2.5	0.7	0.7	1.6	1.6	1.6	1.6	0	1.6	0.7	0.7	0.7	3.3	0	0	0
PLAY	2.5	1.3	3.3	0	2.5	0.7	0.7	1.6	1.6	1.6	1.6	0	1.6	0.7	0.7	0.7	3.3	0	0	0
Ref No.	IC3701																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
STOP	1.3	0.5	0.6	3.3	0	0.7	2.1	0.3	0.3	1.2	3.3	0	0	0	1.2	0.5	0.6	2.5	0	0.6
PLAY	1.2	1.2	1.0	3.3	0	1.3	1.5	1.2	1.3	1.9	3.3	0	0	0	1.2	1.2	1.2	2.5	0	1.0
Ref No.	IC3701																			
MODE	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176				
STOP	2.1	0.3	0.2	1.2	0	0	3.3	0	1.2	0.5	0.6	0.7	2.1	0.3	0.3	1.2				
PLAY	1.0	1.9	1.7	1.1	0	0	3.3	0	1.2	1.2	1.1	1.1	1.5	1.5	1.1	1.4				
Ref No.	IC3731																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	3.3	0	3.3	0	1.2	0	0.5	0.6	3.3	0.6	2.1	0	0.3	-	3.3	0	3.2	2.5	2.5	0
PLAY	3.3	0	3.3	0	1.2	0	1.2	1.2	3.3	0.9	1.6	0	1.2	-	3.3	0	3.1	2.5	2.5	0
Ref No.	IC3731																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	-	1.3	0	2.5	0.7	0.7	2.5	0	3.3	-	2.1	0	0.3	0.3	3.3	1.1	0	0	0	1.2
PLAY	-	1.3	0	2.5	0.7	0.7	2.5	0	3.3	-	1.6	0	1.1	1.3	3.3	0.9	0	0	0	1.2
Ref No.	IC3731																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	3.3	0.4	3.3	0	0.6	0	0.6	2.1	3.2	0.3	0.2	0	1.2	0	3.3	0	-	0	0	1.6
PLAY	3.3	1.1	3.3	0	1.2	0	1.0	1.8	3.3	1.4	1.9	0	0.9	0	3.3	0	-	0	0	1.6
Ref No.	IC3731																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	1.6	1.6	1.6	1.6	0.7	0.7	3.3	1.7	-	-	0	0	-	0.2	3.3	1.2	0	0	0	1.2
PLAY	1.6	1.6	1.6	1.6	0.7	0.7	3.3	1.7	-	-	0	0	-	1.9	3.3	0.9	0	0	0	1.2
Ref No.	IC3731																			
MODE	81	82	83	84	85	86														
STOP	3.3	0.5	0.5	0	0.6	0														
PLAY	3.3	1.2	1.2	0	1.0	0														
Ref No.	IC3751																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	3.2	0	3.2	0.8	0.5	0.4	0.5	3.2	0	0	0	3.2	0	3.2	0	0	0	0	0	0
PLAY	3.2	0	3.2	1.2	1.2	1.2	1.3	2.2	1.5	1.6	0.4	3.2	0	3.2	0	0	0	0	0	0
Ref No.	IC3751																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	3.2	1.5	0	3.1	3.2	3.0	3.3	3.3	0.5	0	0.4	3.2	0.5	0	0	1.5	3.3
PLAY	0	0	0	3.2	1.6	0	3.1	3.2	3.0	3.3	3.3	0.5	0	0.5	3.2	0.5	1.6	1.5	1.5	3.3
Ref No.	IC3751																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52								
STOP	3.2	2.7	0.6	0.6	0.9	0.9	0.9	0.6	1.8	0	3.2	0								
PLAY	3.2	2.0	1.5	1.5	1.4	0.8	1.4	1.4	1.3	0	3.2	0								
Ref No.	IC4001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	0	3.3	0.9	0	1.5	0.8	1.0	0.9	1.3	1.6	3.1	0	0	1.6	3.3	3.3	3.3	3.3
PLAY	0	0	0	3.3	0.8	0	1.5	1.0	0.9	0.9	1.8	1.6	3.3	0	0	1.6	3.3	3.2	3.3	3.3

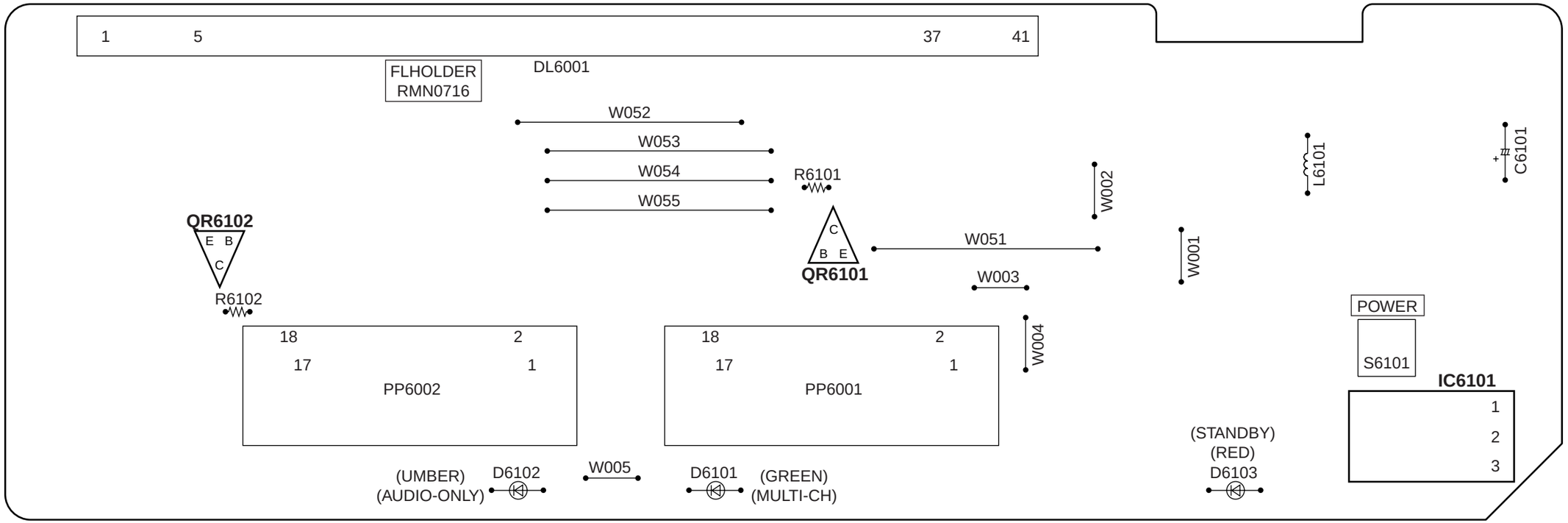
Ref No.	IC4001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	0	3.3	0	0.1	0.1	0	0.1	0.1	0
PLAY	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	0	3.3	0	0.1	0.1	0	0.1	0.1	0
Ref No.	IC4001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0.1	3.3	0.1	0	0.1	0.1	3.3	0.1	0	0	0	1.6	0.1	0	3.3	3.3	0	0	0.1	0.1
PLAY	0.1	1.6	0.1	1.8	0.1	0.1	1.7	0.1	3.3	0	0	1.6	0.1	0	3.3	3.3	0	0	0.1	0
Ref No.	IC4001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	3.3	3.3	3.3	3.3	3.3	0	3.2	1.6	0	0	1.6	0	1.6	1.6	3.3	0	0	3.3	0	3.3
PLAY	3.3	3.3	3.3	3.3	3.3	0	3.2	1.6	0	0	1.6	0	1.6	1.6	3.3	0	0	3.3	0	3.3
Ref No.	IC4001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	0	1.4	3.3	3.3	0.2	3.3	0	3.3	3.3	0	1.6	3.3	0	1.4	0.1	0.5	1.5	3.3	1.9	1.9
PLAY	0	3.3	3.3	3.3	0.3	3.3	0	3.3	3.3	0	1.6	3.3	0	-0.1	0	0	0	0	0	0
Ref No.	IC4001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	2.4	1.9	2.5	1.5	0.4	0	0	0	0	0	0	3.3	2.1	1.8	2.2	1.8	1.5	1.4	2.5	0
PLAY	0	0	0	0	0	0	0	0	0	0	0	3.3	1.7	1.8	1.6	0.6	1.4	1.4	0.6	0
Ref No.	IC4001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
STOP	0.7	1.0	2.4	0	1.6	0	3.0	0	3.3	3.3	2.5	2.5	1.6	2.4	0	1.4	2.9	1.4	0.8	0.7
PLAY	0.3	0.3	1.1	0	1.6	0	2.4	0	3.3	3.3	2.2	2.1	0.7	0.4	0	0.7	0.7	2.4	0.7	0.7
Ref No.	IC4001																			
MODE	141	142	143	144																
STOP	1.1	1.6	0	0																
PLAY	0.7	1.6	0	0																
Ref No.	IC4021																			
MODE	1	2	3	4	5															
STOP	3.3	0	3.3	1.3	1.6															
PLAY	3.3	0	3.3	1.3	1.6															
Ref No.	IC4031																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	1.6	3.3	1.6	0	0	0	0	1.6	1.6	1.6	1.6	1.6	1.6	0	3.3				
PLAY	0	1.6	3.3	1.6	1.2	0.1	1.2	0	1.6	0	1.6	1.6	0	1.6	0	3.3				
Ref No.	IC4041						IC4051						IC4061							
MODE	1	2	3	4	5		1	2	3	4	5		1	2	3	4	5	6	7	8
STOP	3.3	3.3	0	3.3	3.3		2.9	3.3	0	2.9	3.3		1.5	2.9	0.4	0	2.9	3.3	3.3	3.3
PLAY	3.3	3.3	0	3.3	3.3		2.4	3.1	0	2.2	3.3		1.5	2.3	1.0	0	2.2	3.3	3.3	3.3
Ref No.	IC4201																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	1.6	0	1.6	0	3.3	5.0	2.5	2.5	0	2.5	0	0	3.3	2.7	3.3	1.6				
PLAY	1.6	1.2	1.6	0	3.3	5.0	2.5	2.5	0	2.5	3.3	0	3.3	2.7	3.2	1.6				
Ref No.	IC6201																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	3.0	3.3	3.3	3.3	3.3	3.3	2.9	3.3	0	3.3	3.3	2.3	2.5	2.5	1.8	3.3	1.3	0	0
PLAY	0.3	2.4	3.1	3.3	3.3	3.0	3.3	2.3	3.3	0	3.3	3.3	1.4	2.3	2.2	1.7	3.3	1.3	0	0
Ref No.	IC6201																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	3.3	3.3	1.6	1.5	3.3	2.3	1.5	3.0	1.6	0.9	0.7	1.1	0.9	3.3	1.6	0.8	1.0	1.0	1.3	0.4
PLAY	3.3	3.3	1.6	1.5	3.3	2.1	1.8	2.1	1.4	1.1	1.1	1.3	0.8	3.3	1.5	1.0	0.8	0.9	1.8	1.4
Ref No.	IC6201																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	2.7	2.3	0	3.3	3.3	3.3	3.3	0	1.6	2.9	1.0	0	3.3	3.3	0	3.3	3.3	0	0	0
PLAY	1.7	1.1	0	3.3	3.3	3.3	3.3	3.3	1.6	2.9	1.0	0	3.3	3.3	3.2	3.3	3.3	0	0	3.2
Ref No.	IC6201																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	0	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.7	3.3	3.3	3.2	3.3	3.3	0.1	3.3	0	0	3.3
PLAY	0	0	3.3	0	3.3	3.3	3.3	3.3	0.1	2.7	3.3	3.3	3.2	3.3	3.2	0.1	0	0	0	3.2
Ref No.	IC6201																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	3.3	3.3	3.3	0.7	0.7	0.7	0.7	3.3	3.3	0.7	0.7	0	0.5	0.5	0.5	3.3	0.5	3.3	0.5	0.5
PLAY	3.3	3.3	3.3	0.7	0.7	0.7	0.7	0.7	3.3	0.7	0.7	0	3.3	3.3	0.5	0.5	3.3	3.3	0.5	0.5
Ref No.	IC6251						IC6301													
MODE	1	2	3	4	5		1	2	3	4	5									
STOP	5.0	5.0	3.3	-	0		0	0	0	3.3	3.3									
PLAY	4.9	4.9	3.3	-	0		0	0	0	3.3	3.3									
Ref No.	IC6302																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.3	1.0	1.0	0.8	1.5	1.0	1.1	0.7	-	-	3.3	3.3	-	-	-	2.3	2.7	1.0	1.5	3.0
PLAY	1.4	0.8	0.9	1.0	1.5	0.8	1.3	1.2	-	-	3.2	3.3	-	-	-	1.3	1.6	1.1	1.5	2.1
Ref No.	IC6302																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	1.5	2.5	1.8	2.5	2.5	2.9	0	3.0	2.0	2.2	1.9	1.9	2.5	1.5	2.0	1.4	3.3	2.5	2.5	1.5
PLAY	1.8	2.2	1.8	2.1	2.3	2.3	0	2.3	1.8	1.6	1.6	1.4	1.9	1.5	1.7	1.3	3.3	1.8	2.3	1.4
Ref No.	IC6302																			
MODE	41	42	43	44	45	46	47	48												
STOP	0.7	2.2	1.1	1.7	2.6	0	3.3	0.4												
PLAY	1.3	1.7	1.5	1.7	2.3	0	3.3	0.4												
Ref No.	IC6303																			
MODE	1	2	3	4	5	6	7	8												
STOP	0	0	0	0	3.3	0	0	3.3												
PLAY	0	0	0	0	3.3	3.3	0	3.3												
Ref No.	IC6501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	3.3	0	1.6	1.4	3.3	0	1.5	1.5	1.5	1.6	0	3.3	1.5	3.3	1.5	3.3				
PLAY	3.3	0	1.6	1.4	3.3	0	1.5	1.5	1.5	1.6	0	3.3	1.5	3.3	1.5	3.3				

Ref No.	Q3101			Q3111			Q3116			Q3761			Q3766			Q3771				
MODE	1	2	3	1	2	3	1	2	3	E	C	B	E	C	B	E	C	B		
STOP	1.0	0	0.4	1.0	0	0.4	1.1	0	0.4	1.2	0	0.5	1.2	0	0.5	1.1	0	0.4		
PLAY	1.3	0	0.6	1.1	0	0.5	1.0	0	0.3	1.3	0	0.5	1.2	0	0.5	1.4	0	0.6		
Ref No.	QR3261			QR6301																
MODE	1	2	3	1	2	3														
STOP	0	0	3.3	0	3.3	0														
PLAY	0	0	3.3	0	3.3	0														

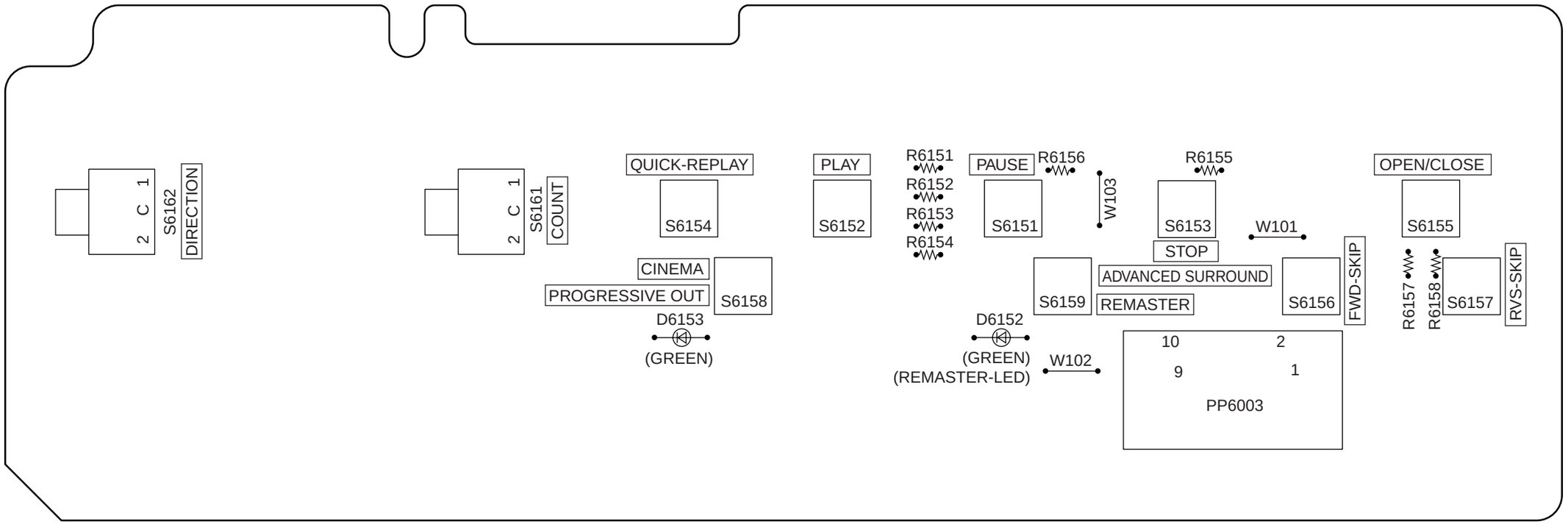
Ref No.	IC2501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	1.6	1.6	1.6	2.3	2.3	2.2	0	4.8	3.3	0	2.8	2.6	2.8	2.8	4.2	4.2	5.9	2.4	0	3.2
STOP	1.6	1.6	1.8	2.0	2.0	1.6	0	4.9	3.3	0	2.8	2.8	2.8	2.8	4.2	4.2	4.2	4.2	0	3.2
Ref No.	IC2501																			
MODE	21	22	23	24	25	26	27	28												
PLAY	8.8	8.7	1.8	1.6	1.6	1.6	3.3	3.1												
STOP	8.9	8.8	1.6	1.6	1.6	1.6	3.3	3.2												
Ref No.	IC5201																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	0	0.6	3.2	0	4.5	1.6	1.6	1.4	3.3	3.3	0	1.8	1.6	0	0	0	3.2	0.5	0	1.6
STOP	0	0	4.6	0	4.6	1.6	1.6	1.6	3.3	3.3	1.5	1.8	1.6	0	0	0	3.3	0.5	0	1.6
Ref No.	IC5201																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY	2.0	1.6	1.6	1.6	3.2	1.8	1.8	1.0	1.7	1.4	2.2	2.0	2.0	2.1	1.9	1.0	4.9	2.2	2.2	2.3
STOP	1.6	1.6	1.6	1.5	3.3	1.8	1.7	0.9	1.7	0.6	2.2	2.2	2.2	2.9	1.6	1.6	5.0	2.2	2.2	2.2
Ref No.	IC5201																			
MODE	41	42	43	44	45	46	47	48												
PLAY	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2												
STOP	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2												

Ref No.	IC6101																				
MODE	1	2	3																		
PLAY	3.2	3.3	0																		
STOP	3.2	3.3	0																		

FRONT 1 P.C.B.

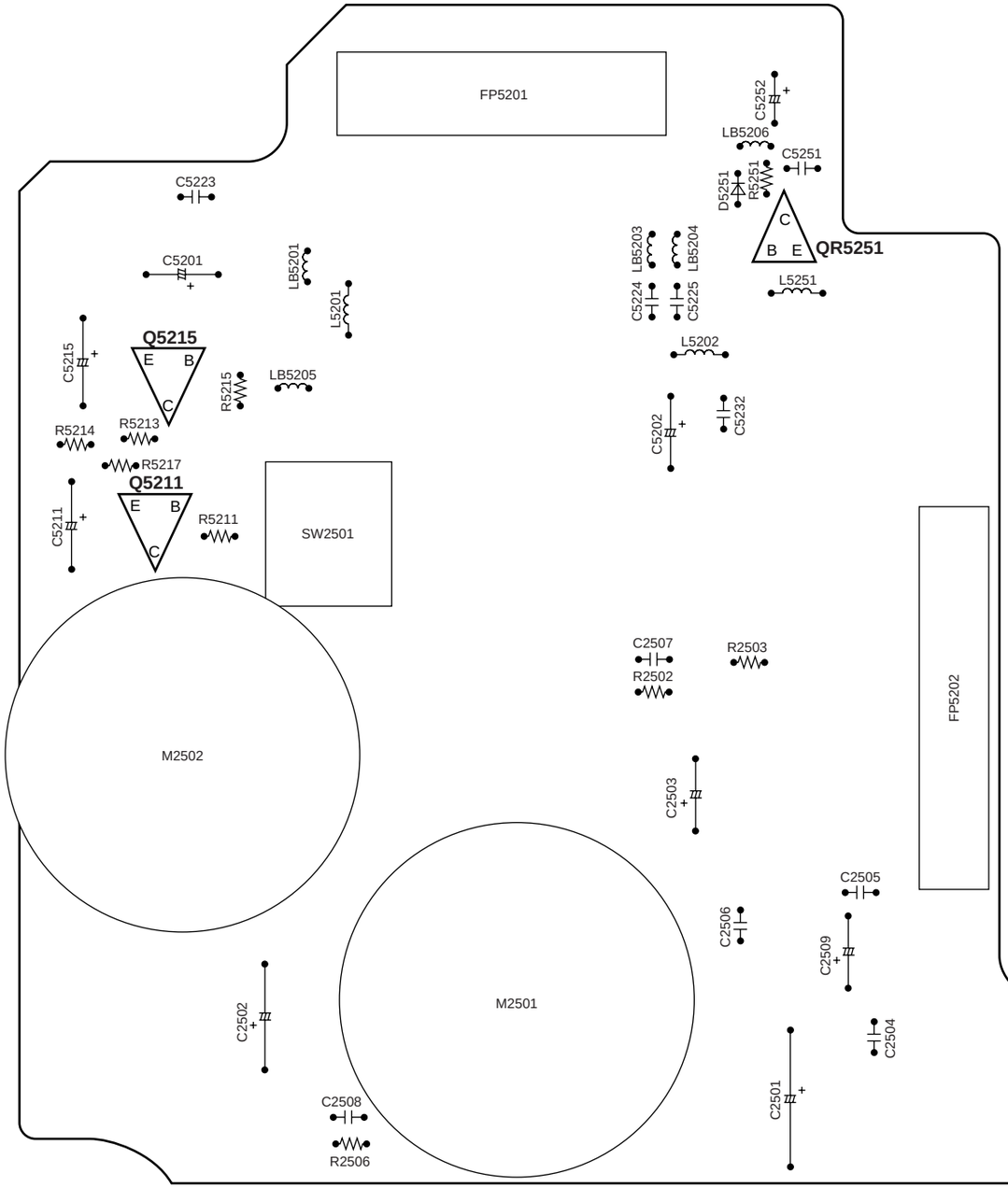


FRONT 2 P.C.B.



DVD-RP62P/PC
FRONT1 P.C.B. :REP3390AA
FRONT2 P.C.B. :REP3390AB

INTERMEDIATE P.C.B.



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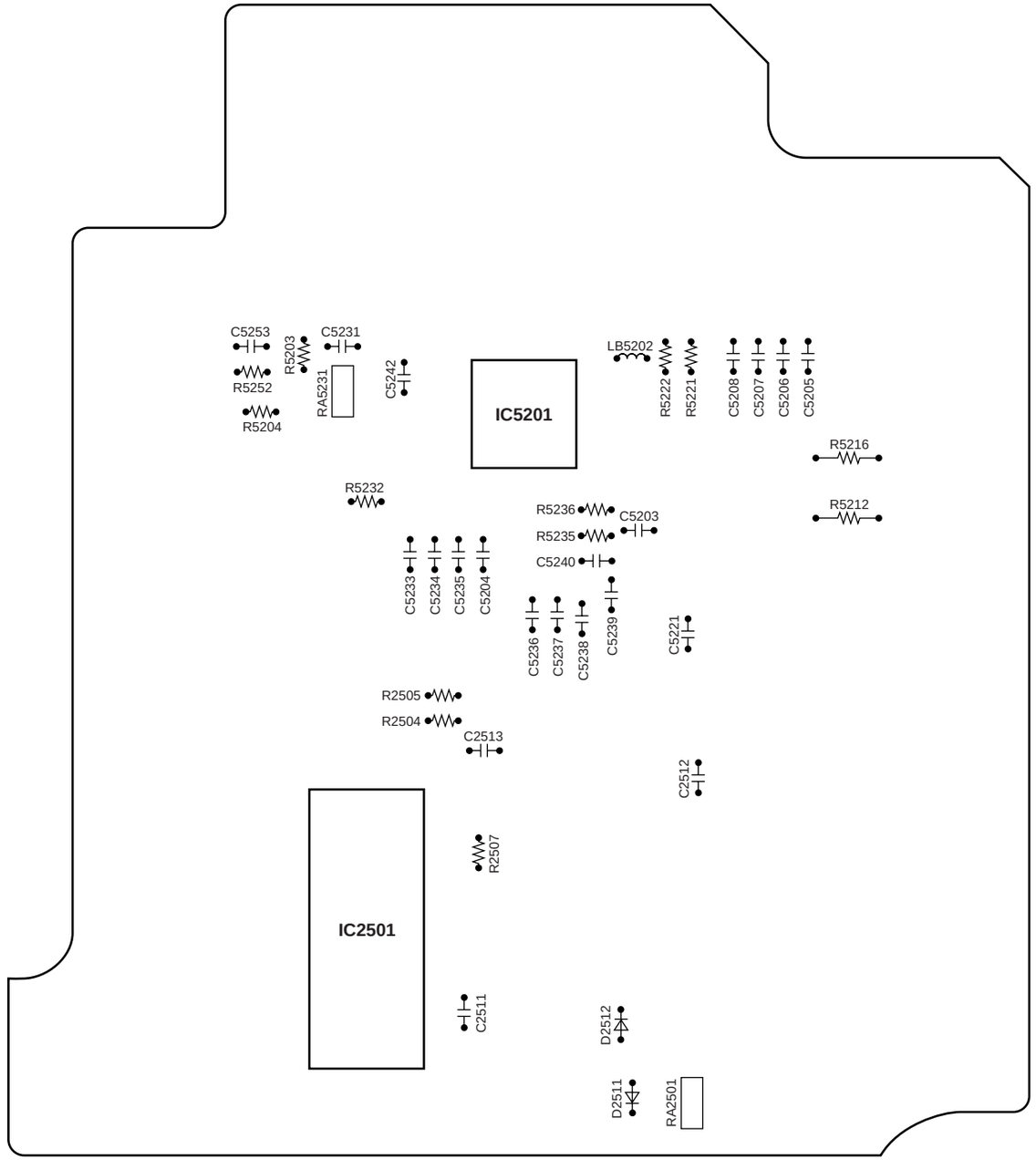

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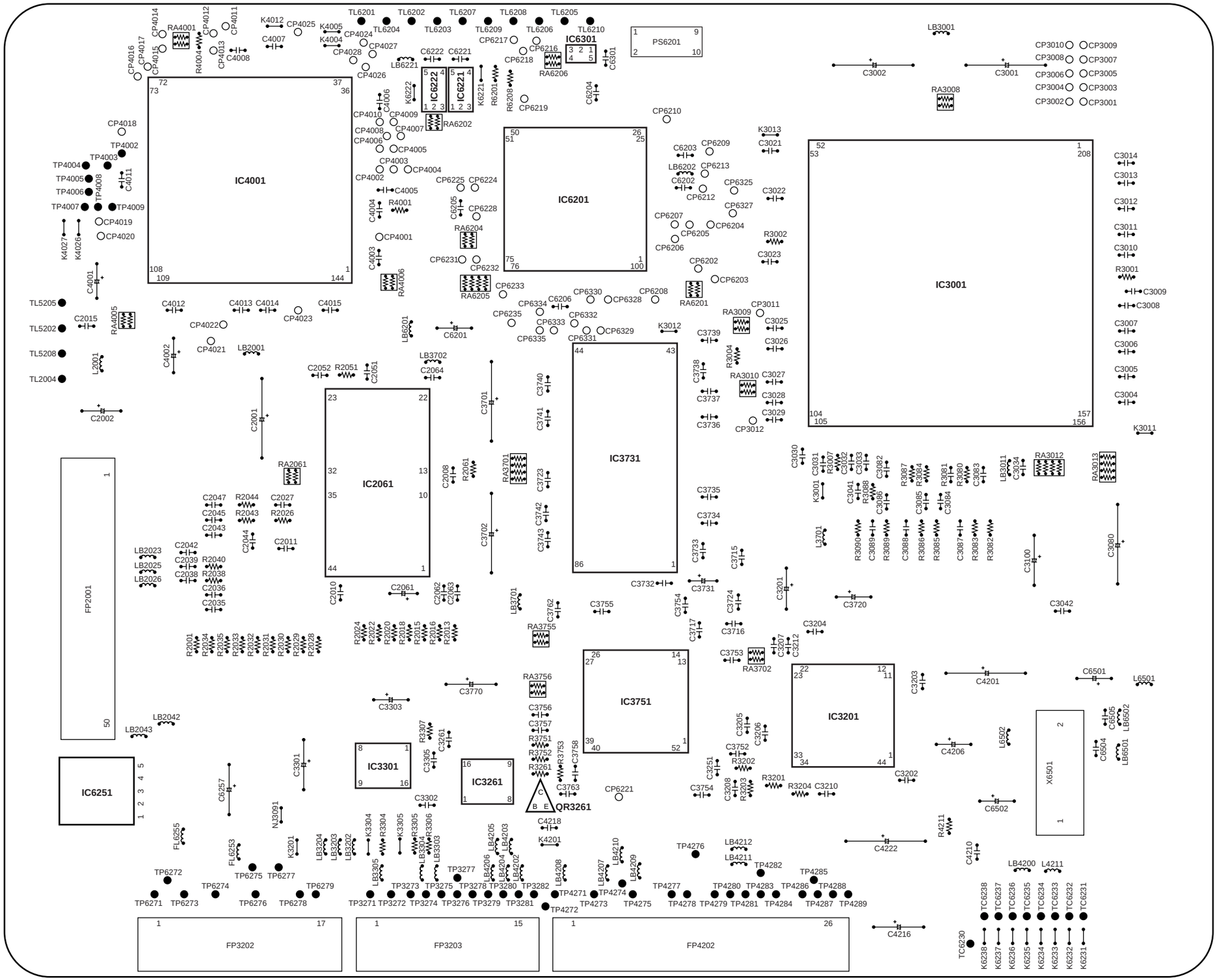
DVD-RP62P/PC
INTERMEDIATE P.C.B.
REP3091B-1N

MODULE P.C.B. (1/2)



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DVD-RP62P/PC
MODULE P.C.B.
REP3385A